Administrative County of Middlesex.

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

FOR THE

YEAR 1949.

LONDON:
HARRISON AND SONS, LTD., 45, ST. MARTIN'S LANE, W.C.2.
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PREFACE.

To the Chairman, Aldermen and Members of the County Council of Middlesex.

Sir, Ladies and Gentlemen,

I have the honour to submit my report on the health of the County for the year 1949. This has been the first complete year during which the County Council has discharged the duties of a Local Health Authority laid upon it by the National Health Service Act, 1946. In reviewing the progress which has been made one must confess to a certain sense of disappointment that it has not been possible to give greater effect to the intention of the Act to provide a comprehensive and efficient health service available to all members of the community. In my report for 1947, in commenting upon the provisions of the Act, I pointed out that four separate authorities would be concerned with the day to day administration of matters affecting the health of the general population in any given area and stressed that many difficult problems of co-ordination would arise and that if the splendid potentialities of the Act were to be fully realised, it must be administered by all parties concerned with wisdom, foresight and the greatest flexibility. It cannot be disguised that as yet little has been done to secure that real co-operation between the different branches of the health service which is so vitally necessary. Although the exchange of views between the bodies responsible for their administration is possible through inter-representation at the levels both of the Health Committee, Regional Hospital Boards, and Executive Council, and of the Area Committees, Hospital Management Committees, and area representatives of the Local Medical, Dental and Pharmaceutical Committees, there is a total lack of suitable machinery for any sort of joint action. This is not due to lack of good will on the part of any of those concerned but may be attributed mainly to the absence of any clear guidance either in the Act itself or any of the circulars relating to it as to the methods to be adopted. Indeed, in certain respects the existing arrangements are such as actually to add to the difficulties rather than to smooth them away. As an example one may cite the anachronism created by the total absence of any correspondence between local health areas and hospital catchment areas. Whereas the former follow local government boundaries, and in this are paralleled by the local organisation of the Executive Council, hospital catchment areas have no reference whatsoever to these boundaries. In consequence the situation arises that two or more Hospital Management Committees may be operating within the territory of a single Area Committee and vice versa. It would not seem an insuperable task to re-define hospital catchment areas so that they bore a reasonable relationship to existing local government boundaries and this would enormously simplify the task of co-operation between local health and hospital authority.

The Act envisaged the Health Centre as the common ground on which the separate branches of the national health service would meet, providing opportunities for mutual discussion and exchange of ideas and enabling the services which they required to use jointly, to be provided with the maximum of economy. It was recognised that such a novel conception required that the initial health centres should be provided on an experimental basis and their development on any large scale must await the result of practical experience. Nevertheless, it was hoped that an adequate number of experimental health centres might be established at an early date and in Middlesex provision was made in the budget for 1949–50 for the initial expenditure in connection with four comprehensive health centres. However, for various reasons, no further advance was made and there now seems little hope, in view of the increasingly difficult economic position, that it will be possible to establish even a single experimental health centre of a comprehensive type for a very long time to come.

Nevertheless, some departmental action was taken in the matter. At my request, the medical advisory committee set up a health centre sub-committee charged with the duty of advising on the design and development of health centres in Middlesex. Under the chairmanship of Dr. Hogben, joint Area Medical Officer, No. 3 Area, who was largely responsible for the design of two admirable and comprehensive health clinics in Tottenham, the sub-committee first bent its energies, in close consultation with the County Architect, to the design of a prototype comprehensive health centre. An important principle underlying the design of this prototype centre was the planning of the various services in suitably related units, each capable of independent curtailment or expansion to suit local circumstances, and with a lay-out readily adaptable to sites of varying sizes or shapes. The first drafts were submitted to the Middlesex Local Medical, Dental and Pharmaceutical Committees and to the Senior Administrative Medical Officers of the North West and North East Metropolitan Regional Hospital Boards for their observations. In each instance the draft plans were given most careful consideration and the suggestions received were successfully embodied in the final plans. Thus there is already in existence an admirable model design upon which to base plans for actual health centres as soon as it is found possible to provide them.

As regards the services provided by the County Council under Part III of the National Health Service Act, it can be said that in spite of the difficulties only to be anticipated in the integration and re-organisation of services, some new and others previously varying widely in scope and development, the year's record was one of progress and increasing smoothness of operation. Much of the credit for this is due to the Area Medical Officers for the spirit of co-operation in which they carried out their duties.

It is, however, to be regretted that for reasons outside the control of the County Council, it was not possible in some directions to offer the public so complete a service as could have been wished. The services particularly affected were the home nursing and home help services, in both of which it was necessary to deal with applications for assistance to some extent on a basis of priority. This was due in part to difficulty in recruiting staff up to the establishment approved by the County Council but also to the additional burden thrown on the local health authority by inability on the part of Regional Hospital Boards to find a sufficiency of beds to meet the needs of all aged and chronic sick persons who were in need of hospital treatment.

An unduly heavy burden was also thrown on the health visiting staff, which was severely handicapped by a general national shortage of health visitors. It is hoped that plans which are in hand for the establishment by the County Council of a training course of its own for health visitors will lead to an improvement in the numbers seeking to enter the service of the County Council.

In spite of all set-backs, the health of the County has continued to attain an increasingly high level, and compares favourably with almost any other part of Great Britain. The general death rate rose slightly to 9·8 per 1,000. The application of the Registrar-General's comparability factor raised this to 10·6 but even so it was still below the figure for England and Wales as a whole (11·7). The figures for infantile mortality (death during the first year of life) created a new low record at 24·2 per 1,000 live births. The maternal mortality rate, however, was slightly higher at 0·96 compared with 0·91 per 1,000 births for 1948. As mentioned in the body of this report, one of the justifiable criticisms of the National Health Service Act is the division of responsibility for the care of the health of expectant mothers between three different branches of the national health service, and until better co-operation is secured one cannot but feel that the efficiency of the maternity services is being prejudiced.

In connection with infectious diseases the outstanding feature of the year has been the absence of a single death from diphtheria. In so populous a county as Middlesex this is an outstanding achievement and bears eloquent testimony to the efficacy of the campaign for diphtheria immunisation which has been waged with vigour for the past 10 years. It is therefore necessary, as a warning against complacency, to refer to the fact that 1949 has shown a disquieting drop in the figures for immunisation. If this tendency were to continue, the ground which has been won in the fight against this dread disease would soon be lost.

Though the figures did not reach those of 1947, there was a material increase in the number of cases of anterior poliomyelitis notified, which rose from 118 in 1948 to 301. A considerable amount of research into the aetiology of this serious disease is going on and it is to be hoped that this will lead to the shedding of some light on the problem of suitable preventive measures, since at present these can only be carried out on more or less empirical lines.

It is encouraging to note that there was a small fall in the number of new cases of tuberculosis notified, thus reversing the trend of recent years. In this connection it is also interesting to observe the very considerable fall in incidence of tuberculosis in the dairy herds from which Middlesex draws its milk supply. This may be attributed primarily to an increase in the number of tuberculin-tested herds and the growth of the attestation scheme, but it is very necessary to ensure that the new milk legislation which came into force this year and took from local authorities most of their powers in connection with the supervision of milk production, does not result in the very important aspect of human health in relation to milk production receding into the background.

On the curative side, good progress in the treatment of respiratory tuberculosis continues to be made, and the death rate for the year fell to 0·336 per 1,000, which is a new low record. The prospect of the early introduction of B.C.G. (*Bacillus Calmette-Guerin*) immunisation against the disease in susceptible persons affords good hope of still further improvement in its control. A study of the section of this report dealing with tuberculosis will also show that the ground has been prepared for the introduction of a number of other important developments in the County Council's campaign against tuberculosis.

The subject of health education is assuming increasing importance with the passage of the years. The steady improvement in the standard of general education throughout the community, has made it possible and desirable to look to the members of the public themselves more and more for active co-operation in the attainment of that high standard of positive health which should be the ultimate aim of all preventive medicine. The effectiveness of such co-operation must depend, however, on the public being well informed and receptive of the principles of healthy living. A high standard of training of the health staff is not sufficient. They must also be capable of getting across successfully

the information which they have to impart. Recognising this need, the County Council arranged during the year a two-day course at which members of its health staff were given the opportunity of learning from the lips of acknowledged experts the methods which have been found most successful in the instruction of the public through various channels of approach. A copy of the addresses given appears later in this report.

The success of this course was mainly the result of the enthusiasm and energy of my deputy, Dr. Hartston, to whom I am glad to acknowledge my indebtedness. It also gives me great pleasure to express once more my appreciation of the excellent work of the whole staff, both professional and clerical, based on the central office of the health department.

I am no less grateful to the Chairman and members of the Health Committee for the consideration and support which I have received throughout the year, while the welcome I have received from the Chairmen and members of the Area Committees have made the visits I have paid to their meetings not merely a duty but a pleasure.

I have the honour to be,

Your obedient servant,

A. C. T. PERKINS,
County Medical Officer of Health.

County Health Department,
3, 5 and 7, Old Queen Street,
Westminster, S.W.1.

STAFF.

County Medical Officer of Health and School Medical Officer :

A. C. T. Perkins, *M.C.*, M.D., B.S., D.P.H.

Deputy County Medical Officer of Health and Deputy School Medical Officer :

W. Hartston, M.D., B.S., M.R.C.P., D.P.H., D.T.M. & H.

Principal Assistant Medical Officers :

H. E. Beasley, M.B., B.S., D.P.M.

S. Carter, M.D., D.P.H., B.Hy.

J. F. Macgregor, L.R.C.P., L.R.C.S., D.P.H.

Mrs. E. J. Madeley, M.B., Ch.B., D.P.H., D.M.R. & E.

Miss D. Taylor, M.A., L.R.C.P., M.R.C.S., M.B., B.S., D.P.H.

Chest Physicians :

(Joint appointments by County Council and Regional Hospital Board.)

B. A. Butterworth, M.B., M.R.C.P., M.R.C.S.

J. Vernon Davies, *M.C.*, M.D., M.B., B.S., M.R.C.P.

R. Heller, M.D.

J. V. Hurford, M.D., M.R.C.P., D.P.H.

T. A. C. McQuiston, M.D., M.B., D.P.H.

N. Macdonald, M.B., Ch.B., M.R.C.P.

J. T. Nicol-Roe, M.D., Ch.B., D.P.H.

C. H. C. Toussaint, M.R.C.S., L.R.C.P., D.P.H.

H. J. Trenchard, M.B., Ch.B., M.R.C.P.

Psychiatrist :

Miss M. K. Ruddy, M.D., B.S., B.Sc.

Senior Medical Officer—Mental Health :

Miss R. D. Fidler, M.R.C.S., L.R.C.P., D.P.H. (Appointed 14th March, 1949.)

Senior Medical Officer—London and Northolt Airports :

L. H. Thomas, M.R.C.S., L.R.C.P.

Chief Dental Officer :

J. F. Pilbeam, F.D.S.R.C.S.(Eng.).

Specialist Dental Officer :

S. E. Charman, *M.B.E.*, L.D.S. (Left 31st March, 1949.)

Special Services Almoners :

Miss D. Myer.

Miss I. B. Munro (Assistant Almoner). (Appointed 4th April, 1949.)

AREA No. 1.

Joint Area Medical Officers :

W. D. Hyde, M.B., Ch.B., D.P.H.

D. Regan, B.A., B.Sc., M.B., Ch.B., D.P.H.

Area Dental Officer :

E. Underhill, L.D.S.R.C.S. (Appointed 1st April, 1949.)

AREA No. 2.

Joint Area Medical Officers :

W. C. Harvey, M.D., D.P.H.

M. Manson, *M.C.*, *G.M.*, M.A., M.D., D.P.H.

Area Dental Officer.

G. S. Williams, L.D.S.R.C.S. (Appointed 1st April, 1949.)

AREA No. 3.

Joint Area Medical Officers :

R. P. Garrow, M.D., M.B., Ch.B., D.P.H., R.C.P.S. (Lond.). (Retired 8th September, 1949.)

G. H. Hogben, M.R.C.S., L.R.C.P., D.P.H.

Area Dental Officer :

V. Sainty, L.D.S.R.C.S. (Appointed 5th May, 1949.)

AREA No. 4.

Joint Area Medical Officers :

A. F. Adamson, M.D., D.P.H.

A. A. Turner, *M.C.*, M.D., D.P.H.

Area Dental Officer :

K. C. B. Webster, L.D.S.R.C.S. (Appointed 1st June, 1949.)

AREA No. 5.

Area Medical Officer :

Caryl Thomas, M.D., B.Sc., D.P.H., Barrister-at-Law.

Area Dental Officer :

A. G. Brown, L.D.S.R.C.S. (Appointed 20th June, 1949.)

AREA No. 6.

Joint Area Medical Officers :

E. Grundy, M.D., D.P.H.

S. Leff, M.D., D.P.H., Barrister-at-Law.

Area Dental Officer :

Miss A. S. Stewart, L.D.S.R.C.S. (Appointed 20th June, 1949.)

AREA No. 7.

Joint Area Medical Officers :

W. G. Booth, M.D., M.B., M.R.C.S., L.R.C.P., D.P.H.

G. C. B. Payne, M.D., B.S., M.R.C.S., L.R.C.P., D.P.H.

Area Dental Officer :

A. H. Millett, L.D.S.R.C.S. (Appointed 20th June, 1949.)

AREA No. 8.

Area Medical Officer :

O. C. Dobson, M.D., D.P.H., D.P.A., Barrister-at-Law.

Area Dental Officer :

G. M. Davie, L.D.S.R.C.S. (Appointed 5th April, 1949.)

AREA No. 9.

Area Medical Officer :
A. Anderson, M.D., D.P.H.

Area Dental Officer :
E. E. Lewis, L.D.S.R.C.S. (Appointed 1st April, 1949.)

AREA No. 10.

Area Medical Officer :
J. Maddison, M.A., M.D., D.P.H.

Area Dental Officer :
J. V. Bingay, *M.B.E.*, L.D.S.R.C.S. (Appointed 1st April, 1949.)

County Council Establishments of :—

Area Medical Officers	10
Deputy Area Medical Officers	10
Senior Assistant Medical Officers (female)	10
Senior Assistant Medical Officers (male)	10
Assistant Medical Officers	77
Senior Airport Medical Officer	1
Airport Medical Officers	4
Area Dental Officers	10
Specialist Dental Officers	3
Orthodontists	13
Dental Officers	86
Dental Attendants	112
Duly Authorised Officers	34
Non-Medical Supervisors of Midwives and Home Nursing Superintendents	10
Nurses Home Superintendents	13
District Midwives	213
Home Nurses	300
Superintendent Health Visitors	10
Deputy Superintendent Health Visitors	10
Health Visitors and School Nurses	338
Tuberculosis Visitors	38
Superintendent Matrons of Day Nurseries	9
Supervisory Wardens of Day Nurseries	10
Home Help Organisers	10
Home Helps	1,250
Chest Clinic Welfare Officers	9
Chest Clinic Assistant Welfare Officers	5

Rehabilitation Workshops—Tottenham :

Supervisor/Instructor—W. R. Osment. (Appointed 6th May, 1949.)

Mother and Baby Homes :

Amherst Lodge, Ealing.—Matron—Miss F. M. Dilley, S.R.N., S.C.M. (Appointed 27th July, 1949.)

Belle Vue, Willesden.—Matron—Miss R. Matthews, S.R.N., S.C.M., H.V. Cert. (Appointed 27th June, 1949.)

SUMMARY OF VITAL STATISTICS RELATING TO THE ADMINISTRATIVE COUNTY OF MIDDLESEX.

Area (including inland water)			148,691 acres.
Population 1931 (census)			1,638,728
,, 1949 (estimated by Registrar-General)			2,285,650* 2,273,180†
Number of structurally separate dwellings occupied, 1931 (census) ...			348,595
Number of private families, 1931 (census)			431,368
Rateable value			£22,075,630
Product of a penny rate, financial year			£89,202
Live births—	Males.	Females.	Total.
Legitimate	16,555	15,789	32,344
Illegitimate	772	717	1,489
Birth-rate per 1,000 civilian population			14·9 (England & Wales, 16·7‡)
Stillbirths			679
,, Rate per 1,000 total births			19·7
Deaths			22,290
Death-rate per 1,000 Civilian Population			9·8 (England & Wales, 11·7‡)
Number of women dying from diseases and accidents of pregnancy and childbirth :—			
From sepsis			9
From other causes			24
Maternal mortality rate per 1,000 total births			0·96 (England & Wales, 0·98)
Infantile mortality rate per 1,000 live births :—			
Legitimate			24·0
Illegitimate			28·2
Total			24·2 (England & Wales, 32)
Deaths from cancer (all ages)			4,122
,, measles (all ages)...			9
,, whooping cough (all ages)			13
,, diarrhœa (under 2 years of age)			54

* Total population.

† Civilian population (for calculation of birth-rates, death rates, &c.).

‡ Per 1,000 total population.

Administrative County of Middlesex.

ANNUAL REPORT OF THE COUNTY MEDICAL OFFICER FOR THE YEAR 1949.

VITAL STATISTICS.

AREA.—The County of Middlesex covers approximately 232 square miles (148,691 acres inclusive of inland water); it includes no county boroughs so that the administrative and geographical boundaries are co-terminous.

Of the 26 local government areas in the County 15 are Municipal Boroughs (70,196 acres) forming an inner wedge contiguous with or close to, the boundaries with London and Surrey and 11 are Urban Districts (78,495 acres) forming the outer fringe and marching with Buckinghamshire, Hertfordshire and Essex in the West, North and East respectively.

POPULATION.—The Registrar-General's estimate of civilian population for 1949 was 2,273,180. The steady increase in population continues though more slowly than in the immediate post-war years. The Greater London Plan of 1944 envisages a population of two millions only and anything much above this figure is to be viewed with concern on health, as well as other grounds.

Table I, on page 2, shows the size and population of the various local authorities within the County's boundaries. From this table can be seen the relative population changes within the County over the past thirty years.

BIRTHS.—In 1949 there were 33,833 live births giving a rate of 14·9 per 1,000 civilian population. This represents a sharp drop from the peak rate of 19·6 reached in 1947. The rise in the birth rate following the outbreak of war was general to the whole country and a similar phenomenon occurred after the 1914–1918 war. The explanation probably lies in the concentration into a few years of marriages which would normally be spaced over a long period; and, while such predictions are always somewhat hazardous, it seems likely that the rate will flatten out at or a little below the present figure.

Table II below sets out the birth rates over the last five years and compares them with those of London and England and Wales.

It will be seen that the Middlesex birth rate has dropped more sharply than is the general experience.

TABLE II.

Year.	Birth Rate per 1,000 Population.		
	Middlesex (*a*).	London (*a*).	England and Wales (*b*).
1944	19·1	15·0	17·6
1945	17·1	15·7	16·1
1946	19·3	21·5	19·1
1947	19·6	22·7	20·5
1948	16·1	20·1	17·9
1949	14·9	18·5	16·7

(*a*) Per 1,000 civilian population.
(*b*) Per 1,000 total population.

Birth rates by administrative areas and by sanitary districts are shown in Tables A I and A II on pages 7–10. Yiewsley and West Drayton (18·0) and Staines (17·6) have the highest rates in the County, and Wembley (12·5) and Southgate (12·7) the lowest.

The percentage of illegitimate births fell to 4·4; this figure has happily declined each post war year from the peak of 7·1 per cent. in 1945.

DEATHS.—The death rate rose in 1949 to 9·8 per 1,000 population (9·1 in 1948) but is lower than that for England and Wales as a whole. Old folk are naturally more likely to die than the young, except for the first two years of life, and females are longer living than males so that the age

TABLE I.—ACREAGE AND POPULATION.

Boroughs and Urban Districts.	Acreage.	Population.					No. of separately rated dwellings 1st April, 1949.	No. of persons per dwelling.
		Census.		Estimated by Registrar-General.				
		1921.	1931.	1938.	1949.			
					Total. (*a*)	Civilian. (*b*)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(*c*) (8)	(*c*) (9)
Acton (Borough)	2,318	60,817	70,008	68,670	67,740	67,690	17,787	3·8
Brentford & Chiswick (Borough) ...	2,333	58,499	63,217	61,470	59,750	59,700	14,989	4·0
Ealing (Borough)	8,783	90,312	116,771	161,000	188,700	188,100	49,034	3·8
Edmonton (Borough)	3,896	66,807	77,658	103,200	106,050	105,950	28,245	3·8
Enfield	12,401	60,464	67,752	91,940	111,250	111,150	28,995	3·8
Feltham	4,925	11,392	16,064	30,450	43,690	42,880	10,683	4·0
Finchley (Borough)	3,475	46,628	59,113	65,140	72,080	70,760	18,897	3·7
Friern Barnet	1,340	17,137	22,715	27,120	29,120	28,830	7,161	4·0
Harrow	12,559	49,020	96,656	183,500	222,300	220,400	52,660	4·2
Hayes and Harlington	5,160	9,042	22,969	43,930	66,030	65,980	16,804	3·9
Hendon (Borough)	10,373	57,566	115,640	145,100	158,430	157,130	41,144	3·8
Heston and Isleworth (Borough) ...	7,219	47,463	76,254	101,500	108,200	106,900	27,467	3·9
Hornsey (Borough)	2,872	87,632	95,416	96,680	98,670	98,580	23,681	4·2
Potters Bar	6,129	3,222	5,720	12,010	16,540	16,510	4,871	3·4
Ruislip–Northwood	6,583	9,112	16,035	40,820	66,010	65,400	18,781	3·5
Southall (Borough)	2,606	30,165	38,839	52,400	56,350	56,300	13,869	4·1
Southgate (Borough)	3,763	39,525	56,063	67,860	74,400	74,350	20,806	3·6
Staines	8,273	17,060	21,336	29,920	39,240	39,190	10,260	3·8
Sunbury	5,608	9,904	13,451	16,580	22,410	22,380	6,046	3·7
Tottenham (Borough)	3,013	146,726	157,667	144,400	130,140	130,040	29,053	4·5
Twickenham (Borough)	7,013	69,948	79,299	96,550	108,000	106,900	28,406	3·8
Uxbridge...	10,240	20,626	31,887	42,800	54,150	52,550	13,261	4·0
Wembley (Borough)	6,292	18,239	65,799	118,800	132,340	132,240	35,906	3·7
Willesden (Borough)	4,633	165,742	185,025	187,600	181,320	181,120	43,013	4·2
Wood Green (Borough)	1,607	50,791	54,308	53,190	52,780	52,740	13,616	3·9
Yiewsley and West Drayton	5,277	9,163	13,066	15,670	19,960	19,410	4,942	4·0
THE COUNTY	148,691	1,253,002	1,638,728	2,058,300	2,285,650	2,273,180	580,377	3·9

(*a*) Total population. (*b*) Civilian population (for calculation of birth-rates [illegible]th-rates, &c.). (*c*) Excluding residential flats over shops.

VITAL STATISTICS, 1949.

Table A I.

Health area.	Civilian population.	Total population.	Births.									Live birth rate per 1,000 civilian population.	Still birth rate per 1,000 total (live and still) births.	Total number of deaths (all causes).	Death rate per 1,000 civilian population.	Number of deaths of infants under 1 year of age.	Infantile mortality rate per 1,000 live births.
			Live.			Still.			Total.								
			Legitimate.	Illegitimate.	Total.	Legitimate.	Illegitimate.	Total.	Legitimate.	Illegitimate.	Total.						
Area 1	217,100	217,300	3,125	128	3,253	67	5	72	3,192	133	3,325	15·0	21·7	2,122	9·8	84	25·8
Area 2	172,430	172,840	2,229	74	2,303	40	5	45	2,269	79	2,348	13·3	19·0	1,833	10·6	56	24·3
Area 3	228,620	228,810	3,428	170	3,598	71	3	74	3,499	173	3,672	15·7	20·1	2,593	11·3	88	24·5
Area 4	227,890	230,510	3,053	185	3,238	60	4	64	3,113	189	3,302	14·2	19·4	2,356	10·3	69	21·3
Area 5	220,400	222,300	2,983	100	3,083	64	2	66	3,047	102	3,149	14·0	21·0	1,890	8·6	64	20·8
Area 6	313,360	313,660	4,340	210	4,550	102	11	113	4,442	221	4,663	14·5	24·2	2,955	9·4	110	24·2
Area 7	255,790	256,440	3,574	182	3,756	63	1	64	3,637	183	3,820	14·6	16·8	2,602	10·2	80	21·3
Area 8	203,340	206,150	3,226	131	3,357	47	—	47	3,273	131	3,404	16·5	13·8	1,622	8·0	110	32·8
Area 9	222,900	224,300	3,139	148	3,287	51	4	55	3,190	152	3,342	14·7	16·5	2,216	9·9	83	25·3
Area 10	211,350	213,340	3,247	161	3,408	75	4	79	3,322	165	3,487	16·1	22·7	2,101	9·9	74	21·7
The County...	2,273,180	2,285,650	32,344	1,489	33,833	640	39	679	32,984	1,528	34,512	14·9	19·7	22,290	9·8	818	24·2

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TABLE A II.

Sanitary district.	Civilian population.	Total population.	Births.									Live birth rate per 1,000 civilian population.	Still birth rate per 1,000 total (live and still) births.	Total number of deaths (all causes).	Death rate per 1,000 civilian population.	Comparability factor.	Corrected death rate per 1,000 civilian population.	Number of deaths of infants under 1 year of age.	Infantile mortality rate per 1,000 live births.
			Live.			Still.			Total.										
			Legitimate.	Illegitimate.	Total.	Legitimate.	Illegitimate.	Total.	Legitimate.	Illegitimate.	Total.								
Acton	67,610	67,740	988	52	1,040	20	1	21	1,008	53	1,061	15·4	19·8	730	10·8	*1·01*	10·9	24	23·1
Brentford and Chiswick ...	59,700	59,750	918	49	967	14	—	14	932	49	981	16·2	14·3	634	10·6	*0·97*	10·3	23	23·8
Ealing	188,100	188,700	2,586	130	2,716	43	—	43	2,629	130	2,759	14·4	15·6	1,872	10·0	*1·08*	10·8	56	20·6
Edmonton	105,950	106,050	1,461	66	1,527	32	4	36	1,493	70	1,563	14·5	23·0	1,075	10·1	*1·15*	11·6	38	24·9
Enfield	111,150	111,250	1,664	62	1,726	35	1	36	1,699	63	1,762	15·6	20·4	1,047	9·4	*1·08*	10·2	46	26·7
Feltham	42,880	43,600	692	34	726	20	2	22	712	36	748	16·9	29·4	333	7·8	*1·40*	10·9	21	28·9
Finchley	70,700	72,080	943	38	981	20	—	20	963	38	1,001	13·9	20·0	834	11·8	*0·93*	11·0	19	19·4
Friern Barnet...	28,830	29,120	373	15	388	4	1	5	377	16	393	13·5	12·7	254	8·8	*0·99*	8·7	10	25·8
Harrow	220,400	222,200	2,983	100	3,083	64	2	66	3,047	102	3,149	14·0	20·9	1,890	8·6	*1·17*	10·0	64	20·8
Hayes and Harlington ...	65,980	66,030	1,095	45	1,140	17	—	17	1,112	45	1,157	17·3	14·7	485	7·4	*1·51*	11·2	49	43·0
Hendon	157,130	158,430	2,110	147	2,257	40	4	44	2,150	151	2,301	14·4	19·1	1,522	9·7	*1·09*	10·6	50	22·2
Heston and Isleworth ...	106,900	108,200	1,389	60	1,449	24	3	27	1,413	63	1,476	13·6	18·3	1,051	9·8	*1·09*	10·7	25	17·3
Hornsey	98,580	98,670	1,514	75	1,589	35	3	38	1,549	78	1,627	16·1	23·4	1,153	11·7	*0·93*	10·9	38	23·9
Potters Bar	16,510	16,540	244	8	252	3	—	3	247	8	255	15·3	11·8	128	7·8	*1·11*	8·7	4	15·9
Ruislip-Northwood	65,400	66,010	954	31	985	19	—	19	973	31	1,004	15·1	18·9	485	7·4	*1·20*	8·9	16	16·2
Southall	56,300	56,350	832	39	871	13	1	14	845	40	885	15·5	15·8	531	9·4	*1·12*	10·5	35	40·2
Southgate	74,350	74,400	926	18	944	20	1	21	946	19	965	12·7	21·8	820	11·0	*0·86*	9·5	24	25·4
Staines	39,190	39,240	651	39	690	19	—	19	670	39	709	17·6	26·8	386	9·8	*1·11*	10·9	12	17·4
Sunbury	22,380	22,410	369	20	389	6	—	6	375	20	395	17·4	15·2	178	8·0	*1·14*	9·1	7	18·0
Tottenham	130,040	130,140	1,914	95	2,009	36	—	36	1,950	95	2,045	15·4	17·6	1,440	11·1	*1·07*	11·9	50	24·9
Twickenham	106,900	108,000	1,535	68	1,603	30	2	32	1,565	70	1,635	15·0	19·6	1,204	11·3	*0·98*	11·1	34	21·2
Uxbridge	52,530	54,150	843	40	883	9	—	9	852	40	892	16·8	10·1	481	9·2	*1·18*	10·9	28	31·7
Wembley	132,240	132,340	1,604	51	1,655	37	2	39	1,641	53	1,694	12·5	23·0	1,075	8·1	*1·17*	9·5	36	21·8
Willesden	181,120	181,320	2,736	159	2,895	65	9	74	2,801	168	2,969	16·0	24·9	1,880	10·4	*1·10*	11·4	74	25·6
Wood Green	52,740	52,780	686	33	719	13	3	16	699	36	735	13·6	21·8	631	12·0	*0·96*	11·5	18	25·0
Yiewsley and West Drayton	19,410	19,960	334	15	349	2	—	2	336	15	351	18·0	5·7	171	8·8	*1·26*	11·1	17	48·7
THE COUNTY	2,273,180	2,285,650	32,344	1,489	33,833	640	39	679	32,984	1,528	34,512	14·9	19·7	22,290	9·8	*1·08*	10·6	818	24·2

and sex composition of a population will be a factor affecting the death rate. The structure of the Middlesex population is favourable in this respect, and before it can be fairly compared with the rate for England and Wales it is necessary to multiply the Middlesex rate by a figure (1·08) known as the comparability factor: by this device any difference in structure between the general and the local populations is ironed out. The theoretical rate for Middlesex works out at 10·6 which is still below the general rate for England and Wales (11·7), and it is legitimate to infer, since the favourable local figure has continued for some years, that the Middlesex environment is relatively favourable to good health.

It is interesting to note that the England and Wales death rate rose from 10·8 in 1948 to 11·7 in 1949: this rise is slightly greater than the rise in the Middlesex figure over the preceding year.

On pages 7–10 of this report will be found Tables A I and A II which include the death rates by administrative areas and by sanitary districts.

Diseases of the heart and circulation were certified as causing 44 per cent. of all deaths; the great majority in persons over 65 years of age. Cancer was the second commonest cause of death (18·5 per cent.): 1,635 of these deaths were in people between 45 and 65 and 2,145 in those over 65. Bronchitis (6·2) and pneumonia (4·9) were important causes of death, mostly in the elderly.

In Middlesex, tuberculosis, a preventable disease, was responsible for more than 2 deaths a day throughout the year. These were for the most part in young adults and in early middle age.

A table showing the causes of death at different periods of life in the County is included in Table A III on page 11.

Infantile Mortality.—The infantile mortality rate is always a figure of great interest since it is very sensitive to the local environment and because so great a part of the preventive service is directed to the welfare of infants.

This rate continues to decline: the Middlesex figure for 1949 was 24·2 per 1,000 live births as compared with 32·0 for England and Wales as a whole. The rate for Middlesex in 1948 was 26·3.

The infantile death rates by administrative areas and by sanitary districts will be found in Tables A I and A II on pages 7–10.

On page 4 is a diagram showing the infantile mortality rate in Middlesex over the past eleven years. The steady, and indeed steep, decline will be noted. The same diagram separates the rate for babies dying during the first month of life (neo-natal mortality rate) and it will be seen that the decline here, while steady, is far less. This means, of course, that the greater part of the reduction in infant deaths has been in infants over one month old. Study of the diagram will suggest that the present rate of decline of infant deaths in Middlesex is not likely to continue long.

"Neo-natal mortality and morbidity must be considered in conjunction with stillbirths. The difference between a still birth and a neo-natal death is often very slight and both have many causes in common."* It is for this reason that stillbirths are included in the diagram. The stillbirth rate, like the neo-natal mortality rate shows a slow but steady decline.

"The neo-natal mortality rate, like the stillbirth rate, is considerably higher among the lower income group of the population than amongst the well-to-do."*

There is evidence "that a more general application of present day knowledge of obstetrics and paediatrics by the medical and nursing professions and by those responsible for the social services and for administering hospital and domiciliary midwifery services would result in further considerable reduction in the neo-natal mortality rate. Similarly, if every pregnant woman received first class medical and nursing supervision during pregnancy and labour, the stillbirth rate could also be appreciably decreased."*

Maternal Mortality.—There were 33 maternal deaths in Middlesex in 1949 giving a rate of 0·96 per 1,000 total births as compared with 0·91 for the previous year. The rate for the whole country in 1949 was 0·98.

Table A IV on page 12 of this report sets out the trend of maternal deaths (excluding deaths due to abortion) over the past decade. The divided responsibility, under the National Health Service Act, 1946, between three agencies for the care of expectant mothers does not give rise to a feeling of confidence and it is therefore important to watch the maternal mortality figure as an index of the efficiency of the service.

INFECTIOUS DISEASES.

The year 1949 is memorable as the first in which there were no deaths attributable to diphtheria; the number of cases notified was 23 as compared with 57 the preceding year.

There was a rise in cases notified as poliomyelitis from 118 in 1948 to 301 in 1949. A table showing the age distribution of cases and of deaths from acute poliomyelitis and polioencephalitis is given in Table A V on page 12.

Deaths attributable to pneumonia rose by 224 over the previous year.

Measles remained at almost the same level as in 1948.

There were no cases of smallpox in the County during the year.

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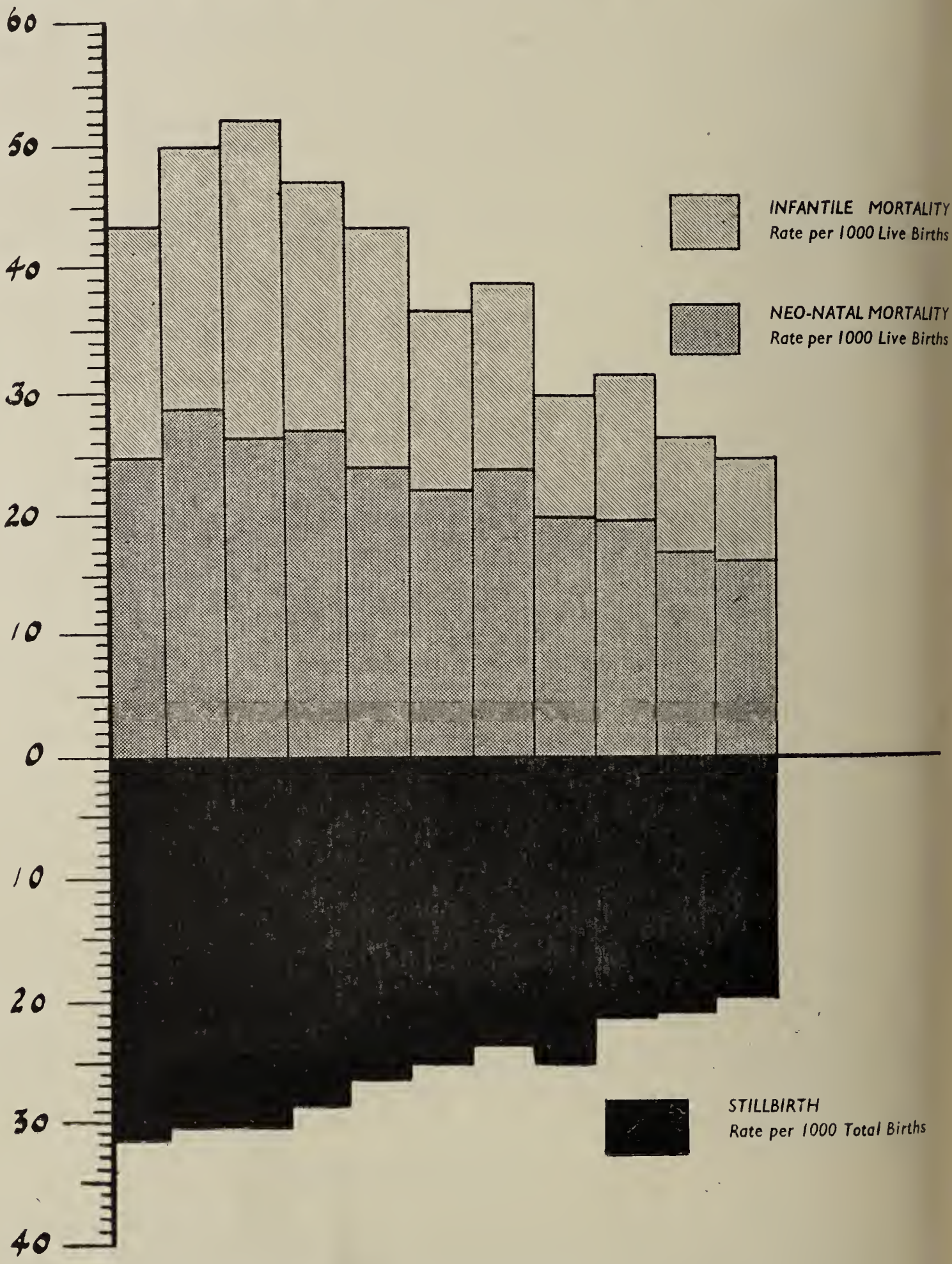
* "Neo-natal Mortality and Morbidity." Report by a Joint Committee of the Royal College of Obstetricians and Gynaecologists and the British Paediatric Association.

YEAR	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	
INFANT MORTALITY	43	50	52	47	43	36	39	30	31	26	24	} Rate per 1,000
NEO-NATAL MORTALITY	25	29	26	27	24	22	24	20	19	17	16	} Live Births.



YEAR	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	
STILLBIRTHS	32	30	30	29	27	25	24	25	21	21	20	{ Rate per 1,000 Total Births.

Table III below shows the incidence of notifiable infectious disease during the year.

TABLE III.

INFECTIOUS DISEASES, 1949.

Disease. (1)	Cases notified. (2)	Case-rate per 1,000 civilian population. (3)	Fatal cases. (4)	Case mortality rate per cent. (5)	Death-rate per 1,000 civilian population. (6)
Scarlet fever	3,404	1·50	—	—	—
Diphtheria	23	0·01	—	—	—
Dysentery	109	0·05	—	—	—
Enteric fever	13	0·005	—	—	—
Erysipelas	364	0·16	—	—	—
Cerebro-spinal fever	40	0·02	8	20·0	0·004
Encephalitis lethargica, acute	1	0·0004	—	—	—
Poliomyelitis, acute	301	0·13	44	14·61	0·02
Polioencephalitis, acute ...	48	0·02			
Measles	17,663	7·77	9	0·05	0·004
Whooping cough	3,969	1·75	13	0·33	0·006
Pneumonia (all forms) ...	1,586	0·70	1,103	*	0·49
Puerperal pyrexia	341	10·1†	9	2·64	0·27‡
Ophthalmia neonatorum ...	65	1·92†	—	—	—
Malaria	10	0·004	—	—	—

* Case-mortality rate cannot be given, as only cases of acute pneumonia are notified, while the figure for deaths includes all forms of the disease.

† Case rate per 1,000 live births.

‡ Death rate per 1,000 live births.

Table A VI on page 13 sets out the incidence of infectious disease by sanitary districts.

VACCINATION.

TABLE IV.

NUMBER OF NOTIFICATIONS RECEIVED OF PERSONS PRIMARILY VACCINATED OR RE-VACCINATED DURING 1949.

Area.	Age in years.				
	Under 1.	1—4.	5—14.	15 or over.	All ages.
1	441	48	37	169	695
2	448	51	51	219	769
3	639	325	63	353	1,380
4	685	331	156	841	2,013
5	453	97	114	233	897
6	2,054	233	284	1,617	4,188
7	715	223	97	460	1,495
8	908	130	107	273	1,418
9	942	480	108	500	2,030
10	1,283	90	118	405	1,896
All Areas	8,568	2,008	1,135	5,070	16,781

The total number of reported vaccinations in the County in 1949 was 16,781 as compared with 16,910 in the previous year.

No cases of generalised vaccinia, post vaccinal encephalomyelitis, or deaths from complications of vaccination were reported during the year.

IMMUNISATION.

During 1949, 30,499 children under 5 years were known to have been immunised against diphtheria as against 33,686 in the previous year ; 2,911 children over 5 but under 15 years were immunised as against 3,245 in 1948. In 1949, 15,673 children were given reinforcing injections compared with 17,790 in 1948.

It is disappointing and disquieting to have to report a drop in the figures for immunisation particularly in the first year in which no deaths from diphtheria were reported.

The figures given for immunised children in 1949 include both those children immunised in the County Council's own clinics and those inoculated by their private doctor.

There was, at the time in question, some doubt and difficulty regarding the remuneration of practitioners for this work and this may have affected adversely the number of notifications received.

There is no doubt that the rapid decline of this fearful disease is very largely due to immunisation and it is most important to hold this fact before a generation of young parents, who perhaps no longer fear diphtheria so greatly, lest in time the scourge returns.

Table A VII on page 14 shows the number of children immunised during the year in each local health area.

Table A VIII on page 14 shows the percentage of the child population immunised at any time to the end of 1949 against diphtheria in each local health area.

Table A III.

Causes of Death at Different Periods of Life in the Administrative County of Middlesex, 1949.

Causes of Death.	All Ages.	0—	1—	5—	15—	45—	65—
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Typhoid and paratyphoid fevers	—	—	—	—	—	—	—
2. Cerebro-spinal fever	8	4	3	—	—	—	1
3. Scarlet fever	—	—	—	—	—	—	—
4. Whooping cough	13	8	5	—	—	—	—
5. Diphtheria	—	—	—	—	—	—	—
6. Tuberculosis of the respiratory system	765	—	3	—	370	290	102
7. Other forms of tuberculosis...	87	2	14	12	30	17	12
8. Syphilitic diseases	142	1	—	—	4	54	83
9. Influenza	177	5	—	1	14	54	103
10. Measles	9	1	3	5	—	—	—
11. Acute polio-myelitis and polio-encephalitis	44	2	8	9	23	2	—
12. Acute infective encephalitis...	12	—	—	1	4	4	3
13. Cancer of buccal cavity and œsophagus (M), uterus (F)	307	—	1	—	19	125	162
14. Cancer of stomach and duodenum	601	—	—	—	28	204	369
15. Cancer of breast	439	—	—	—	55	215	169
16. Cancer of all other sites ...	2,775	1	12	14	212	1,091	1,445
17. Diabetes	142	—	—	1	11	19	111
18. Intra-cranial vascular lesions	2,365	1	—	—	33	460	1,871
19. Heart diseases	6,385	—	—	2	195	1,282	4,906
20. Other diseases of circulatory system	1,083	—	—	—	37	219	827
21. Bronchitis	1,386	6	4	1	38	316	1,021
22. Pneumonia	1,103	107	15	3	44	215	719
23. Other respiratory diseases ...	319	3	1	2	38	108	167
24. Ulcer of stomach or duodenum	242	—	—	—	17	103	122
25. Diarrhœa (under two years)...	54	52	2	—	—	—	—
26. Appendicitis	68	—	4	5	14	27	18
27. Other digestive diseases ...	419	3	5	8	42	126	235
28. Nephritis	423	2	3	9	60	113	236
29. Puerperal and post-abortive sepsis	9	—	—	—	9	—	—
30. Other maternal causes ...	24	—	—	—	24	—	—
31. Premature birth	150	150	—	—	—	—	—
32. Congenital malformations, birth injury, and infantile diseases	498	415	15	12	30	22	4
33. Suicide...	194	—	—	—	51	91	52
34. Road traffic accidents ...	181	—	5	24	55	40	57
35. Other violent causes	453	17	21	16	69	82	248
36. All other causes	1,413	38	29	27	163	286	870
All causes	22,290	818	153	152	1,689	5,565	13,913
Proportionate age group mortality	100	3·7	0·7	0·7	7·6	24·9	62·4

Table A IV.

Maternal Mortality.

Mortality per 1,000 Total (Live and Still) Births. Maternal Mortality Not due to Abortion.

Year.	Infection during childbirth and the puerperium.		Other accidents and diseases of pregnancy and parturition.		All causes excluding abortion.	
	Middlesex.	England and Wales.	Middlesex.	England and Wales.	Middlesex.	England and Wales.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1940	0·34	0·54	1·38	1·64	1·72	2·18
1941	0·58	0·48	1·50	1·77	1·08	2·25
1942	0·29	0·42	1·35	1·60	1·64	2·02
1943	0·44	0·39	1·24	1·44	1·68	1·83
1944	0·11	0·28	0·80	1·24	0·91	1·52
1945	0·09	0·24	0·64	1·23	0·73	1·47
1946	0·16	0·18	0·95	1·06	1·11	1·24
1947	0·18	0·16	0·81	0·86	0·99	1·02
1948	0·08	0·13	0·67	0·74	0·75	0·87
1949	0·12	0·11	0·67	0·71	0·79	0·82

Table A V.

Age Distribution of Notified Cases and of Deaths, Acute Poliomyelitis and Polioencephalitis, 1949.

Number of cases.	Age in years.					All ages.
	Under 1.	1—	5—	15—	25 and over.	
1949.						
First quarter	1	4	4	2	1	12
Second quarter	—	1	9	1	4	15
Third quarter	8	56	55	25	33	177
Fourth quarter	2	51	43	23	26	145
Whole year	11	112	111	51	64	349
Number of deaths ...	2	8	9	25		44

Table A VI.

Notifications of Infectious Diseases, 1949.

Boroughs and Urban Districts.	Scarlet fever.	Whooping cough.	Acute poliomyelitis.	Acute polio-encephalitis.	Measles.	Diphtheria.	Acute pneumonia.	Dysentery.	Smallpox.	Acute encephalitis lethargica.	Enteric fever.	Paratyphoid fever.	Erysipelas.	Cerebro-spinal fever.	Puerperal fever.	Ophthalmia neonatorum.	Food poisoning.	Other notifiable diseases.
Acton (*Borough*)	55	72	15	—	423	2	28	1	—	—	—	—	10	6	—	—	2	—
Brentford and Chiswick (*Borough*)	64	45	4	—	511	—	22	—	—	—	—	—	2	—	3	—	1	—
Ealing (*Borough*)	175	303	19	3	1,450	—	174	20	—	—	3	2	12	8	26	5	12	—
Edmonton (*Borough*)	188	169	15	—	938	1	29	1	—	—	—	—	24	—	51	3	1	MA 1
Enfield	174	559	16	1	1,344	—	85	7	—	—	—	—	19	1	10	5	1	M 2
Feltham	57	66	4	—	265	—	—	2	—	—	2	1	1	1	2	2	3	—
Finchley (*Borough*)	124	88	21	5	381	—	65	2	—	—	—	—	13	1	12	12	5	—
Friern Barnet	54	59	4	—	305	—	26	3	—	—	—	—	4	1	—	—	2	M 1
Harrow	351	191	21	2	2,038	1	77	11	—	—	—	2	26	1	5	1	4	—
Hayes and Harlington	86	116	8	—	308	—	97	2	—	—	—	1	10	3	4	1	3	—
Hendon (*Borough*)...	263	328	32	5	1,195	4	157	6	—	—	—	—	20	4	64	24	41	—
Heston and Isleworth (*Borough*)...	138	173	11	3	523	—	52	2	—	—	—	—	26	2	16	—	11	M 1
Hornsey (*Borough*)	109	98	32	2	697	2	66	6	—	1	3	1	14	1	2	1	3	—
Potters Bar	11	43	1	—	278	—	—	—	—	—	—	—	3	—	—	—	—	—
Ruislip-Northwood	193	145	6	2	738	—	84	4	—	—	—	1	11	1	3	—	8	M 3
Southall (*Borough*)	75	127	8	6	195	—	50	6	—	—	—	—	5	—	2	—	4	MM 1
Southgate (*Borough*)	69	73	3	—	497	—	37	3	—	—	—	1	20	—	13	2	6	—
Staines	62	14	7	1	347	—	16	—	—	—	—	1	—	—	—	—	1	—
Sunbury	21	20	3	1	114	—	—	—	—	—	—	—	—	1	—	—	—	—
Tottenham (*Borough*)	250	199	10	5	968	4	73	2	—	—	—	—	23	4	15	1	7	MI 1
Twickenham (*Borough*)	128	200	14	—	749	—	34	8	—	—	2	1	16		21	—	69	—
Uxbridge	92	171	5	4	350	—	66	9	—	—	—	1	43	—	34	—	1	—
Wembley (*Borough*)	237	252	11	1	1,146	1	139	5	1	—	—	1	26	2	1	1	15	—
Willesden (*Borough*)	340	205	25	4	985	8	161	4	—	—	—	2	29	3	57	7	16	—
Wood Green (*Borough*)	71	46	4	2	678	—	19	2	—	—	2	—	5	1	—	—	4	—
Yiewsley and West Drayton	17	207	2	1	240	—	29	3	—	—	1	2	2	—	—	—	14	—
																		MA 1
	3,404	3,969	301	48	17,663	23	1,586	109	1	1	13	17	364	41	341	65	234	MI 1
																		M 7
																		MM 1

MA—Malaria (Abroad). MI—Malaria (Induced). M—Malaria. MM—Meningococcal meningitis.

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Table A VII.

Number of Children Immunised and Given Reinforcing Injections Against Diphtheria during 1949.

Area.	Number of children immunised.			Number of children given reinforcing injections.
	Under 5 years.	5–15 years.	Total, aged 0–15 years.	
1	2,736	263	2,999	2,097
2	2,182	217	2,399	1,920
3	2,955	144	3,099	698
4	2,844	116	2,960	2,277
5	2,359	179	2,538	166
6	4,937	545	5,482	2,185
7	3,604	652	4,256	2,042
8	2,723	321	3,044	2,051
9	3,313	166	3,479	463
10	2,846	308	3,154	1,774
County ...	30,499	2,911	33,410	15,673

Table A VIII.

Number of Children who had been Immunised Against Diphtheria up to 31st December, 1949.

Area.	Under 5 years.			5–15 years.		
	Population under 5 years.	Total number protected to date.	Percentage of protected population in this age group.	Population 5–15 years.	Total number protected to date.	Percentage of protected population in this age group.
1	18,970	9,919	52·29	29,470	22,367	75·90
2	12,959	7,804	60·22	18,636	15,075	80·89
3	19,148	11,101	57·97	25,389	12,885	50·75
4	16,945	11,140	65·74	26,638	19,611	73·62
5	17,280	8,898	51·49	30,060	20,800	69·19
6	25,350	15,010	59·21	36,730	31,713	86·34
7	20,778	13,453	64·75	29,845	27,095	90·79
8	18,836	10,553	56·03	30,734	22,252	72·40
9	17,425	9,320	53·49	27,202	19,622	72·13
10	18,289	10,676	58·37	31,296	22,881	73·11
County...	185,980	107,874	58·00	286,000	214,301	74·93

TUBERCULOSIS.

During the year the primary notifications of respiratory tuberculosis totalled 2,746, while the deaths from the disease were 765. This constituted a notification rate of 1·21 new cases and a death rate of 0·336 per 1,000 civilian population.

The figure for new cases notified per 1,000 civilian population shows a fall compared with 1947 while the death rate is the lowest yet recorded (see Graph " A " on page 23).

The notifications of non-pulmonary tuberculosis were 275, while the deaths from this form of the disease were 87. This constituted a notification rate of 0·12 and a death rate of 0·038 per 1,000 civilian population (see Graph " B " on page 24).

An apparently high attack rate, as judged by the number of notifications received, could result from earlier diagnosis, better notification, or an actual increase in the number of the population suffering from the disease, or from a combination of these factors.

As, however, the search for early sufferers from the disease has been greatly developed by the use of mass X-ray, coupled with an intensified search for evidence of the disease among people who have been in close contact with a sufferer either in the home, school or place of work, it is probable that earlier detection mainly accounts for the continued maintenance of the incidence rate. This belief may in part be borne out in the falling death rate which could be due to an increase in the number of cases discharged as cured; coupled with an increased longevity of sufferers from the disease, resulting from earlier diagnosis, improved treatment and after care.

It should perhaps be pointed out that as a result of the reduced birth rate over the last three decades the proportion of adolescents and young adults (the most vulnerable age groups) in every 1,000 of the population has decreased, while the number of older (and less vulnerable) persons per 1,000 population has increased. The decrease in the death rate may therefore be due in part to this cause.

Apart from improved methods of clinical treatment and the changes in the age distribution of the population, the increased longevity of tuberculous patients could be due to more effective methods of after-care, such as better supervision in the home by chest clinic staff, coupled with greater assistance in dealing with the social problems resulting from and associated with tuberculosis.

Among these methods of assistance may be mentioned the following County Council services :—

(1) The employment of chest physicians by the County Council in the prevention and after-care service.

(2) The services of tuberculosis health visitors.

(3) The services of tuberculosis welfare officers.

(4) The provision of home helps.

(5) The provision of home nurses.

(6) The loan of nursing equipment.

(7) The provision of additional beds, bedding and clothing.

(8) The provision of additional nourishment.

(9) The provision of transport to and from hospitals and chest clinics.

(10) The arranging of accommodation in recuperative holiday homes.

(11) The provision of occupational therapy and handicraft instruction in the clinic and in the home.

(12) The provision of sheltered workshops.

(13) The arranging of boarding-out facilities for children from tuberculous infected environments.

As this is the first complete year that the County Council has operated the majority of these services as a separate entity from the Regional Hospital Board services, it is fitting to review the work done under these services in more detail.

(1) *Chest Physicians.*—The chest physicians are part-time officers of the County Council and provisionally 3/11ths of their salary is being paid by the County Council. In this capacity they are responsible for integrating the services of the County Council and the Regional Hospital Board in the chest clinics. In an effort to avoid, so far as it is practicable, the undesirable division of loyalties of County Council staff, the arrangements in operation before 1948, namely that the tuberculosis health visitors and welfare officers are responsible to the County Medical Officer through the chest physicians, has been continued. This has been generally successful.

(2) *Tuberculosis Visitors.*—The tuberculosis visitors carry out duties both in the clinic and in the home. Their work in the clinic consists of assisting the doctor with clinic work, thus obtaining first-hand knowledge of the medical condition of their patients, which is of great assistance when visiting the home. The tuberculosis visitor is responsible for following up the patients, advising and encouraging them in dealing with the many difficulties associated with this disease; also obtaining details of the patient's background directly and thus enabling the chest physician and the welfare officer to deal with the patient in the most fitting way in the light of the information

so acquired. The need for close supervision of the patient in the home has increased as the result of many more patients being treated at home due to shortage of accommodation and nursing staff in the hospitals.

An additional responsibility of the tuberculosis visitor is to bring to the clinic by persuasion the home contact of the disease for among these are found further cases and sometimes the original case in the household.

One of the main difficulties experienced by these visitors is the amount of time necessitated in travelling from one case to another in the more scattered areas of the County. During the year the tuberculosis visitors made 46,089 visits.

(3) *Welfare Officers.*—In each clinic there is a welfare officer accompanied in several clinics by an assistant. Following the diagnosis of tuberculosis, patients requiring assistance in dealing with the many problems arising in such a long term disease are referred to the welfare officer who investigates the problems and assists the patients in dealing with the various authorities and departments who are likely to be able to help.

Among the many lines of enquiry followed, and on which assistance is required, apart from those (referred to below) provided by the Local Health Authority, is housing. This is one of the major problems, and includes not only bad structural housing and overcrowding but the very common complaint of unsatisfactory home conditions. Another is the seeking of suitable training facilities and arranging training grants followed by assisting the patient in obtaining suitable work. Help in negotiations with the Ministries of Pensions and National Insurance is also often necessary.

Contrary to the common belief that the increase of organisations to give assistance in one direction or another, has reduced the work of these officers, it has in fact increased as much correspondence has to be entered into regarding original claims, assessments and appeals. The significance of the many forms and correspondence is discussed and explained to the family affected by a disease, in which anxiety is of particular detriment.

The number of contacts which welfare officers are compelled to make is increased by the fact that in some of these clinics they have to deal with five Assistance Board officers, two area medical officers and two divisional finance officers.

During the year the welfare officers handled 9,057 cases.

4. *Provision of Home Helps.*—There was a demand for home help service throughout the year which often exceeded the supply. As the organisation of the County's home help service under Section 29 was not completed in the early part of the year, chest clinic welfare staff continued to assist by endeavouring to get suitable people to undertake the work. In view of the great shortage of hospital beds there was a considerable demand for the service.

The Chest Physician advises on the degree of rest and service required by the patient and the home help organisers endeavour to fulfil the requirements so laid down. A great deal of work is thrown on the chest clinic welfare officers.

During the year 1,509 tuberculous cases were attended which represents 12·76 per cent. of the total number of cases in receipt of domestic assistance. In view of the prolonged period for which home help is usually necessary in a tuberculous case, the hours of home help given to tuberculous cases are much greater than the figure indicated at first sight suggests.

(5) *Home Nursing.*—In view of the number of patients treated at home, this service has had great demands made upon it for the nursing of tuberculous patients.

(6) *Loan of Nursing Equipment.*—The arrangements whereby nursing equipment is loaned to patients by the British Red Cross Society, the charges being met by the County Council, continued throughout the year. The cost of this service was approximately £35.

The articles loaned were those not usually available in the normal household, such as bed pans, sputum mugs and bedrests.

This service is administered by the chest clinic welfare staff in conjunction with the British Red Cross Society.

(7) *Provision of Additional Clothing and Bedding.*—The County Council makes provision through its after-care service for the provision of extra bedding and clothing where need exists and where it cannot be provided from other sources. This particularly applies to the families of low wage earners.

Additional bedding is often necessary to permit the patient to sleep alone and frequently arises in association with the provision of new housing, when the additional bedding can be utilised.

The Council provided additional bedding and clothing at a cost of approximately £1,387 throughout the year to tuberculous families.

This service which is administered by the chest clinic welfare staff requires considerable time and investigation to ensure that it is not abused.

(8) *Provision of Additional Nourishment.*—Tuberculosis has been known as a disease of poverty. It is essential that patients should have an adequate diet, particularly of fats. In the case of the families of lower paid workers, grants in kind of up to 12*s.* 6*d.* per week are made to supplement the food supply. Such grants are made in cases of hardship, having regard to an agreed scale and where such assistance is not available from other sources.

The cost of such assistance during the year was approximately £2,193.

(9) *Transport of Patients to and from Hospitals and Clinics.*—Throughout the year the County Ambulance Service in conjunction with the British Red Cross Society's Hospital Car Service, carried patients to and from chest clinics and hospitals, when this was necessary owing to the physical condition of the patient.

(10) *Accommodation in Recuperative Holiday Homes.*—During the year 62 patients not in need of nursing attention, but needing a period of convalescence, were admitted to recuperative holiday homes. They included a number of children suffering from a non-pulmonary form of the disease. Some difficulty was encountered in providing accommodation for the infective patient requiring a period of convalescence. Ordinary convalescent homes, are, naturally rather chary of accepting tuberculous patients, particularly infectious cases.

(11) *Handicraft Instruction.*—At the beginning of the year the County Council employed two instructors in diversional therapy, who gave instruction both in clinics and in patients' homes. This staff was doubled towards the end of the year.

An exhibition sale of the work of tuberculous patients was held in November. There was a good display of articles, which included needlework, felt toys, plaster work, rugs, paintings, wood carving and basket work.

The work was very much appreciated by the patients. There was a far greater demand for this instruction than could be met, which was, to some extent, due to the amount of time the instructors have to devote to preparation, *e.g.*, setting up of looms, collecting and banking money, travelling considerable distances and arranging the issue of materials. Where the chest clinic welfare staff have been able to assist in this work, for example by distributing materials and collecting monies, the service has improved, as it enables the instructor to visit more patients.

2,507 visits were made during the year.

Materials were available at cost, plus 10 per cent., through the occupational therapy store. Difficulty was sometimes encountered by patients in buying the initial materials and it is felt that this is a place where the resources of some charitable county fund in the hands of the chest clinic welfare staff would be an advantage.

Difficulty was also met with by patients in disposing of some of the articles made which somewhat handicapped their further activity, as the purchase of further material often depends on the satisfactory disposal of the work already carried out.

(12) *Rehabilitation.*—Following the removal of the sheltered workshop from the Edmonton Chest Clinic to more suitable premises at The Lido, Tottenham, in December, 1948, it became possible to increase the establishment of the workshop. During the year 20 men were accepted for admission to the workshop for training, and at the end of the year there were 19 journeymen cabinet makers employed and 10 men undergoing training. The majority were only fit to work twenty hours per week initially. They were engaged on light cabinet making, fulfilling orders for the Supplies Department for articles such as cabinets, stools, index boxes, filing trays and work-benches.

These employees, due to the infectious nature of their disease, are almost entirely incapable of being employed safely in the open market. The improved outlook of these men in the knowledge that they are useful members of the community is most striking. Since the men are employed in the County, they are able to return home daily. During the training period (3–6 months) the men receive financial allowances from the Ministry of Labour. On completion of training and acceptance as County Council employees, they are remunerated by the County Council at trade union rates as journeymen cabinet makers.

There is a considerable waiting list for this workshop and further provision is necessary in other portions of the County. Arrangements are in hand to extend the existing workshop and provide also a sewing room and cobbler's shop.

The County Council also utilises the rehabilitation centres of Papworth and the British Legion at Preston Hall which provide similar type of training, coupled with residence, at the centres. Fifteen cases were maintained at Papworth and nine cases at Preston Hall during the year.

(13) *Boarding-out of Children from Tuberculous Environments.*—During the year children were boarded out from their homes :—

(*a*) where they were exposed to a serious danger of infection ; and

(*b*) because of the inability of their guardians to care for them as a result of tuberculosis.

In category (*a*) 130 new cases were boarded out, whilst in category (*b*) 49 new cases were boarded out, the latter cases being dealt with in co-operation with the Children's Department. During the year a total of 313 children were dealt with under these arrangements.

Hostels for Homeless Tuberculous.—A number of chronic infective patients are not in need of nursing care, but possess no home. These patients create some difficulty in hospitals as they cannot be discharged to ordinary welfare homes without risk to susceptible staff and inmates of these homes.

During the year many properties were inspected to ascertain their suitability as hostels. Some difficulty was encountered on planning and other grounds. A suitable house was, however, finally obtained in Twickenham, where it is intended to house a number of tuberculous men.

Protective Vaccination against Tuberculosis.—During the year the Ministry requested Local Health Authorities to submit proposals for a scheme to vaccinate certain children living in contact with tuberculosis with a view to increasing their resistance to the disease, and the County Council agreed to submit such proposals. Preliminary steps were also taken to co-operate with the Medical Research Council in research work with B.C.G. vaccine among school leavers in a limited part of the County.

It will be seen from the foregoing that the County Council's activities in this field were many and varied, but that room for further development still exists.

TABLE I.

SUMMARY OF WORK OF CHEST CLINICS, 1949.

	Edmonton.	Finchley.	Willesden.	Ealing.	Hounslow.	Uxbridge.	Tottenham.	Edgware.	Harrow.	TOTAL.
Population in area served (approx.)...	217,100	286,030	281,120	255,790	377,950	259,640	185,780	187,130	222,640	2,273,180
Number of persons seen for the first time during the year	2,682	3,268	3,328	3,489	4,011	2,814	2,757	2,642	2,593	27,584
Number of persons seen for the first time found to be tuberculous ...	244	252	341	270	370	380	288	244	262	2,651
Number of new contacts seen for the first time during the year	787	737	1,174	676	1,112	1,130	742	1,313	728	8,399
Number of new contacts found to be tuberculous	12	33	34	25	27	16	34	15	30	266
Number of cases on register at 31st December, 1949	1,365	1,638	2,004	2,050	2,526	2,208	1,527	1,669	1,498	16,485
Number of home visits by tuberculosis visitors during 1949 ...	3,612	6,779	3,598	5,224	7,896	6,719	4,443	4,399	3,419	46,089

TABLE II.

SUMMARY OF THE WORK OF TUBERCULOSIS WELFARE OFFICERS, 1949.

	Edmonton.	Finchley.	Willesden.	Ealing.	Hounslow.	Uxbridge.	Tottenham.	Edgware.	Harrow.	TOTAL.
Cases investigated	886	820	1,016	1,053	1,621	913	839	1,141	768	9,057
Number of grants to patients and dependents—										
(*a*) Clothing	15	6	16	8	13	4	23	33	12	130
(*b*) Bedding	18	12	15	13	23	9	34	20	15	159
Cases of overcrowding about whom representations were made ...	63	47	130	93	119	91	233	216	32	1,024
Cases of overcrowding successfully rehoused during the year	10	27	21	26	71	11	14	44	25	249
Patients having home helps at any time during 1949 (including those continuing in service from 1948) ...	153	178	191	185	232	143	177	137	146	1,542
New child contacts boarded out during the year	12	6	13	8	2	15	13	58	3	130
Child contacts boarded out during the year	19	32	44	19	8	31	55	92	13	313

Table III.

New Cases of, and Deaths from Tuberculosis, Notified to Medical Officers of Health during 1949, Classified into Age Groups.

Age in years.	New Cases.				Deaths.			
	Pulmonary.		Non-pulmonary.		Pulmonary.		Non-pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1	12	14	5	2	—	—	1	1
1—	42	34	22	16	3	—	6	8
5—	51	32	15	13	—	—	9	3
10—	48	43	13	10				
15—	176	166	16	21				
20—	222	256	10	16	182	188	14	16
25—	337	315	29	31				
35—	250	163	15	20				
45—	220	73	2	4	224	66	6	11
55–65	150	33	6	2				
Over 65	80	29	2	5	77	25	4	8
All ages ...	1,588	1,158	135	140	486	279	40	47

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TABLE IV.

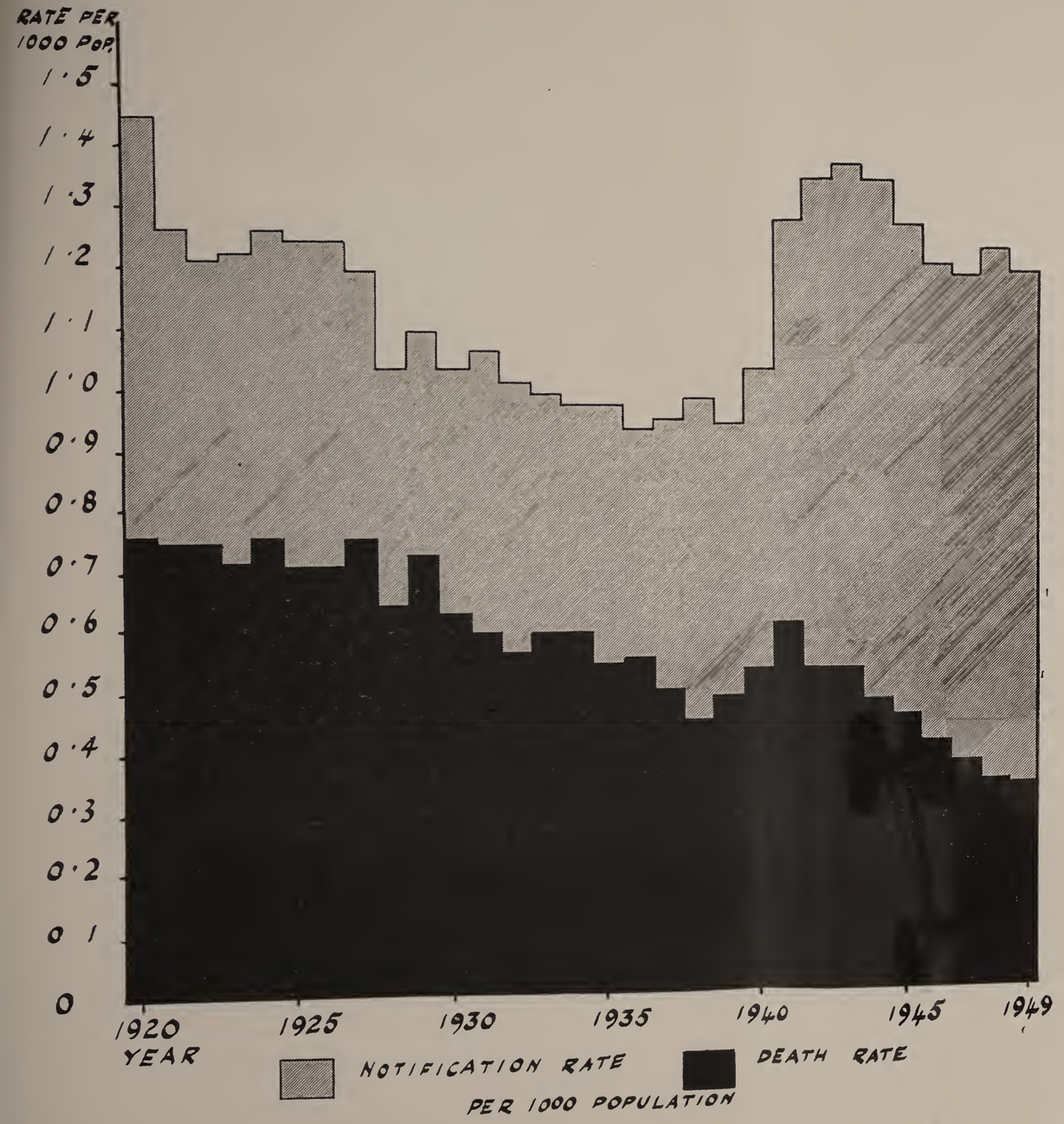
NOTIFICATION OF TUBERCULOSIS CASES AND DEATHS, 1920–1949.

Year.	County population (mid-year).	Primary notifications of new cases.						Deaths notified.					
		All forms.		Pulmonary.		Non-pulmonary.		All forms.		Pulmonary.		Non-pulmonary.	
		No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.
1920	1,277,990	2,218	1·74	1,887	1·48	331	·26	1,178	·92	974	·76	204	·16
1921	1,258,340	1,931	1·53	1,604	1·27	327	·26	1,180	·94	944	·75	236	·19
1922	1,265,871	1,823	1·44	1,529	1·21	294	·23	1,142	·90	948	·75	194	·15
1923	1,274,848	1,944	1·52	1,565	1·23	379	·29	1,120	·88	916	·72	204	·16
1924	1,289,320	1,982	1·54	1,635	1·27	347	·27	1,188	·92	986	·76	202	·16
1925	1,302,950	1,982	1·52	1,630	1·25	352	·27	1,097	·84	922	·71	175	·13
1926	1,325,260	2,009	1·52	1,655	1·25	354	·27	1,138	·86	944	·71	194	·15
1927	1,352,040	2,015	1·50	1,621	1·20	394	·30	1,193	·88	1,024	·76	169	·12
1928	1,416,600	1,819	1·28	1,478	1·04	341	·24	1,071	·76	909	·64	162	·12
1929	1,458,810	1,911	1·31	1,606	1·10	305	·21	1,215	·83	1,058	·73	157	·10
1930	1,560,120	2,015	1·29	1.623	1·04	392	·25	1,164	·75	981	·63	183	·12
1931	1,639,300	2,120	1·29	1,749	1·07	371	·22	1,160	·71	989	·60	171	·11
1932	1,702,530	2,108	1·24	1,733	1·02	375	·22	1,144	·67	965	·57	179	·10
1933	1,756,820	2,082	1·19	1,750	1·00	332	·19	1,224	·70	1,046	·60	178	·10
1934	1,810,200	2,098	1·16	1,767	0·98	331	·18	1,266	·70	1,086	·60	180	·10
1935	1,866,800	2,151	1·15	1,826	0·98	325	·17	1,187	·64	1,028	·55	159	·09
1936	1,940,400	2,151	1·11	1,833	0·94	318	·17	1,257	·65	1,096	·56	161	·09
1937	2,014,500	2,312	1·15	1,932	0·96	380	·19	1,177	·58	1,008	·50	169	·08
1938	2,058,300	2,469	1·20	2,048	0·99	421	·21	1,109	·54	932	·45	177	·09
1939	2,056,100	2,313	1·12	1,952	0·95	361	·17	1,174	·57	1,012	·49	162	·08
1940	1,952,100	2,410	1·23	2,043	1·04	367	·19	1,217	·62	1,055	·54	162	·08
1941	1,874,900	2,804	1·49	2,435	1·29	369	·20	1,326	·70	1,154	·61	172	·09
1942	1,929,900	3,081	1·60	2,617	1·36	468	·24	1,204	·62	1,040	·54	164	·08
1943	1,938,000	3,110	1·60	2,675	1·38	435	·22	1,191	·61	1,042	·54	149	·07
1944	1,902,500	2,944	1·54	2,595	1·36	349	·18	1,066	·56	920	·48	146	·08
1945	1,958,000	2,879	1·47	2,504	1·28	375	·19	1,035	·53	900	·46	135	·07
1946	2,178,010	3,018	1·38	2,668	1·22	350	·16	1,039	·48	894	·41	145	·07
1947	2,248,180	3,010	1·34	2,704	1·20	306	·14	962	·43	855	·38	107	·05
1948	2,262,700	3,185	1·41	2,828	1·25	357	·16	907	·40	790	·35	117	·05
1949	2,273,180	3,021	1·33	2,746	1·21	275	·12	852	·38	765	·34	87	·04

All rates are per 1,000 population.

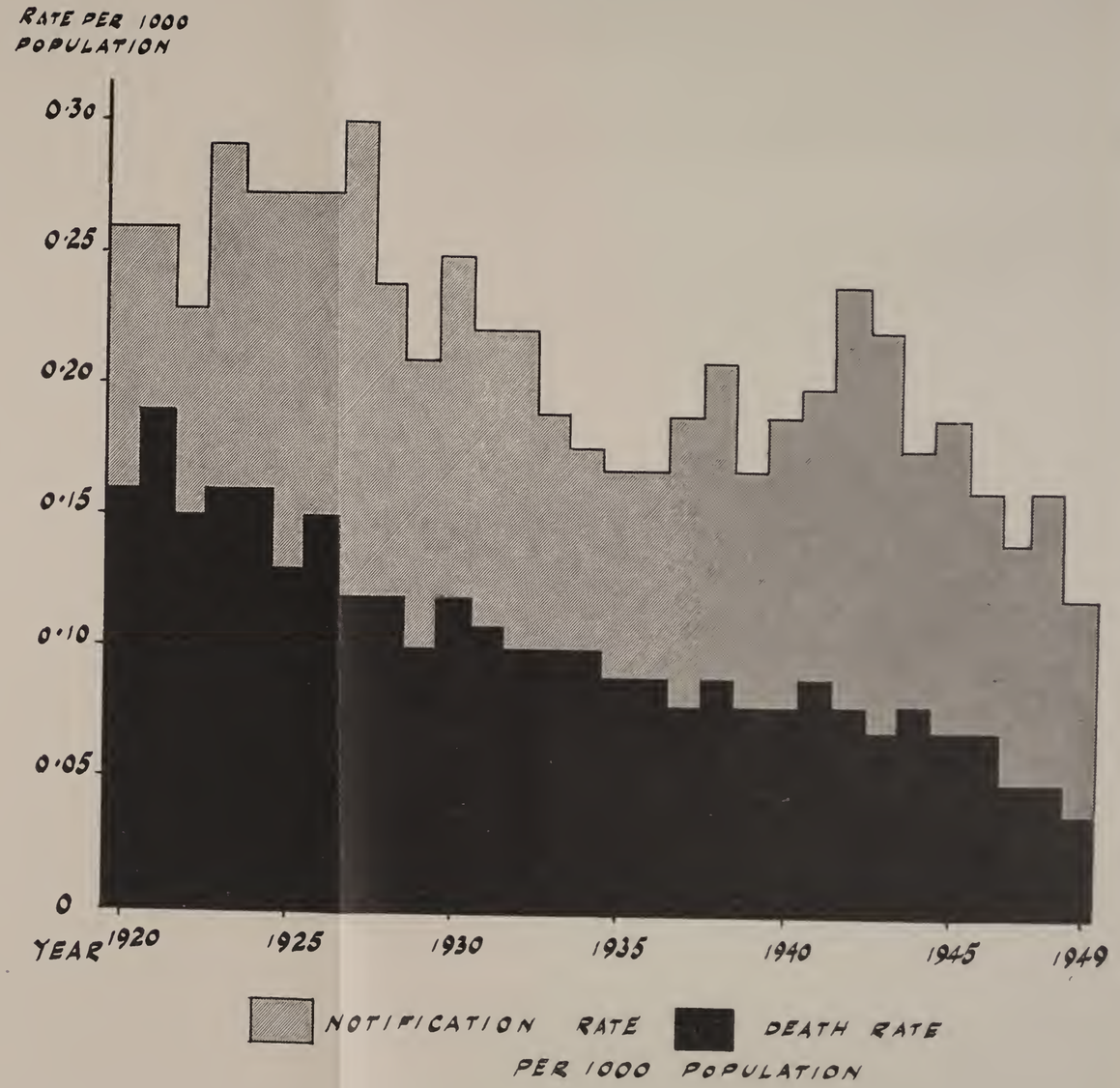
GRAPH A

MIDDLESEX COUNTY COUNCIL
PULMONARY TUBERCULOSIS
NOTIFICATION & DEATH RATES
1920–1949



GRAPH B

MIDDLESEX COUNTY COUNCIL
NON-PULMONARY TUBERCULOSIS
NOTIFICATION & DEATH RATES
1920–1949



VENEREAL DISEASE.

The County Council almoners have continued to attend at medical officer's sessions at venereal disease clinics in Middlesex. There has been a steady decline in the number of infected patients attending for the first time and many of these were infected in the war or early post-war period. The old infection is often disclosed in a routine test particularly at an ante-natal clinic and may result not only in the pregnant woman but also her husband and children attending. These family groups, because they are symptomless, find treatment irksome; they are less apprehensive than the newly infected patient and need much more encouragement to attend.

Non-venereal patients continue to attend in large numbers and it is reasonable to assume that these attendances are directly the result of public health propaganda and a more realistic approach by the individual who has risked infection. In spite of the negative results, from the social angle they often require as much help in solving their personal problems as the infected patient.

Visiting where letters fail is undertaken by the County almoners both for Middlesex clinics and others where asked, and is combined with other visiting. The tracing of contacts is now almost entirely confined to the contacts of clinic patients.

Below is a comparative statement of the Middlesex patients treated at clinics in Middlesex and London hospitals during the past five years, while the table on page 26 gives details of the total work of the individual clinics in Middlesex during the years 1945–1949 inclusive.

	Middlesex patients treated at									
	Hospitals in Middlesex.					Hospitals in London.				
	1945.	1946.	1947.	1948.	1949.	1945.	1946.	1947.	1948.	1949.
Number of persons dealt with at the clinics for the first time and found to be suffering from—										
Syphilis	265	414	395	347	268	191	291	287	186	117
Soft chancre	—	1	4	4	(*a*)	2	2	3	1	(*a*)
Gonorrhœa	368	400	340	325	231	393	716	498	400	308
Conditions other than venereal	1,455	1,994	2,150	2,284	1,955	2,244	2,865	2,147	2,116	1,905
Totals	2,088	2,809	2,889	2,960	2,454	2,830	3,874	2,935	2,703	2,330

(*a*) Information not now available.

MIDDLESEX AND OUT-COUNTY CASES TREATED AT MIDDLESEX CLINICS.

	Central Middlesex Hospital.					Hillingdon Hospital.					West Middlesex Hospital.					Prince of Wales General Hospital, Tottenham.					Ashford Hospital. (*a*).			
	1945.	1946.	1947.	1948.	1949.	1945.	1946.	1947.	1948.	1949.	1945.	1946.	1947.	1948.	1949.	1945.	1946.	1947.	1948.	1949.	1946.	1947.	1948.	1949.
Number of persons dealt with at the clinics for the first time and found to be suffering from—																								
Syphilis	135	166	133	105	89	47	62	65	36	30	53	128	92	93	57	75	181	110	114	75	17	19	17	17
Soft Chancre	—	1	3	1	(*b*)	—	—	—	—	(*b*)	—	—	—	—	—	—	2	1	3	(*b*)	—	—	—	(*b*)
Gonorrhœa	145	143	97	108	69	84	116	58	45	39	86	113	76	72	48	127	235	136	118	48	9	5	11	27
Conditions other than Venereal	609	826	742	750	664	305	429	369	358	316	358	516	462	524	437	602	899	703	771	496	29	41	82	42
Totals	889	1,136	975	964	822	436	607	492	439	385	497	757	630	689	542	804	1,317	950	1,006	619	55	65	110	86

(*a*) Clinic opened August, 1946.

(*b*) Information not now available.

HEALTH CONTROL OF AIRPORTS.

Since July, 1947, the County Council has been responsible for the administration of the Health Control Service at the London Airport, Heathrow, and at Northolt Airport. Details of the purpose and method of the health control at airports were set out in the Annual Report for 1947.

The service at Heathrow covers the whole of the 24 hours. At Northolt it is unusual for planes to arrive between 11.30 p.m. and 9.0 a.m. and the health control unit is not staffed between these hours except on notification of delay in any service.

Two corridors for passing of passengers have been in use at London Airport this year. This has been essential owing to the increased loads carried by the new types of aircraft. Plans are being prepared for the provision of a third corridor during the coming year.

At Northolt the new building for arrival passengers has been in use since 1st March, 1949. The accommodation here for the health control unit is much improved compared with that in the old buildings though the provision of only one waiting room has caused congestion and mixing of aircraft loads.

The work of both health control units has proceeded normally. No special difficulties have occurred. There has only been a slight increase in the total passengers passed at London Airport namely, 181,071 as compared with 175,988 in 1948, with a decrease in the number of planes—11,183 in 1949 as compared with 11,726 in 1948. The increase at Northolt has been greater; 181,503 passengers in 1949 as compared with 142,209, and 11,932 planes in 1949 as compared with 9,358 in 1948.

The number of passengers requiring treatment or advice remains steady, 1,073 in 1949 (1,008 in 1948) at Heathrow and 85 in 1949 (66 in 1948) at Northolt. The ordering of ambulances through the County ambulance service was taken over by the staff of the health control units on 17th December, 1949, and up to the end of the year six passengers were seen by the medical officer and sent to their destination by ambulance under this arrangement.

The number of planes requiring disinsectisation has doubled—812 in 1949 compared with 436 in 1948. This is due to increased traffic through Pakistan.

A member of B.O.A.C. crew developed smallpox on a flight to Australia on 23rd May, and the plane had left Australia before the case was diagnosed. Normal precautions were taken on its arrival at London Airport.

A total of 143 persons working in connection with aircraft were vaccinated by the port medical officers.

A case of suspected rats on a plane from evidence of contaminated biscuits was reported. The chief sanitary inspector of Yiewsley and West Drayton was informed and investigated the matter. No rodents were discovered. Suspected droppings were also found on another plane, but no proof was obtained of the presence of rodents on board.

One major accident occurred at London Airport. A Gruman amphibian crashed on take-off at London Airport at 0200 hours on the 28th October. There were four deaths and only one survivor, the assistant pilot. The medical officer on duty certified to the police life extinct. The survivor was immediately taken to the West Middlesex Hospital by car.

Both Airports were declared Sanitary Aerodromes on 23rd September, 1949, under the Public Health (Aircraft) Regulations.

Work carried out in 1949.

Set out below are tables showing details of the work carried out at London Airport and Northolt Airport during the year 1949.

London Airport.

	1st Jan., 1949, to 30th June, 1949.	1st July, 1949, to 31st Dec., 1949.	Total.
Total number of planes arriving	5,097	6,086	11,183
No. of passengers arriving :—			
British	44,084	54,556	98,640
Aliens	37,655	44,776	82,431
Total.	81,739	99,332	181,071
No. of planes issued with Disinsectisation Certificates	266	546	812
No. of Passengers arriving sick and treated	493	580	1,073
No. of aliens inspected under aliens order ...			223
No. of aliens refused entry on medical certificate			2
No. of notifications sent to Medical Officers of Health for surveillance of passengers			54

Place of departure of planes arriving at Heathrow.	1st Jan. to 30th June. Number of		1st July to 31st Dec. Number of		Total number of	
	Aircraft.	Passengers.	Aircraft.	Passengers.	Aircraft.	Passengers.
From Far East or Persia ...	577	9,852	705	9,732	1,282	19,584
From Middle East or South Africa	353	4,864	242	3,269	595	8,133
From South America, South Atlantic or West Africa ...	293	3,447	313	3,552	606	6,999
From North Atlantic or North America	813	17,802	1,040	16,906	1,853	34,708
From Continent	3,061	45,774	3,786	65,873	6,847	111,647
Total	5,097	81,739	6,086	99,332	11,183	181,071

The following table sets out the number of passengers on aircraft arriving at London and Northolt Airports from the continent and North Atlantic who commenced their journeys from other areas.

Area in which passengers commenced journey.	Number of passengers, who commenced their journeys from other areas, arriving in aircraft from :—			
	Continent.		North Atlantic.	
	Heathrow.	Northolt.	Heathrow.	Northolt.
Far East or Persia	1,601	327	404	—
Middle East or South Africa	3,414	2,735	30	—
South Atlantic, South America or West Africa	816	196	1,258	—
Total	5,831	3,258	1,692	—

NORTHOLT AIRPORT.

	1st Jan., 1949, to 30th June, 1949.	1st July, 1949, to 31st Dec., 1949.	TOTAL.
Total number of planes arriving	5,162	6,770	11,932
No. of passengers arriving :—			
British	47,767	73,994	121,761
Alien	24,981	34,761	59,742
Total	72,748	108,755	181,503
No. of passengers arriving sick and treated			85
No. of aliens inspected under aliens order ...			1,300
No. of aliens refused entry on medical certificate	—	—	—
No. of notifications sent to Medical Officers of Health for surveillance of passengers			5

MATERNITY AND CHILD WELFARE.

The first full year of operation of the National Health Service Act has seen several new developments in the Maternity and Child Welfare Section and a number of modifications and expansions of existing services. A full appreciation of the difficulties to be encountered, the needs to be met and the redundancies to be eliminated cannot be expected, particularly in such a complex County as that of Middlesex, until the scheme has been working for some considerable time. This year has shown up a number of such factors, but much yet remains to be done before full co-ordination is attained.

The appointment of senior staff on the Area establishments should do much to effect this co-ordination. The majority of these appointments—senior assistant medical officers, supervisors of midwives and home nurses (joint appointments), superintendent health visitors, day nursery superintendents, and home help organisers, were made during the first half of the year.

The Nurseries and Child-Minders' Regulation Act, 1948, received early consideration. Although by no means comprehensive, it does close certain gaps in existing legislation, though there is more than one undesirable hiatus still remaining. Standards similar to those in operation for local authority day nurseries (as recommended by the Ministry of Health) were laid down for the privately-run day nurseries. There is no similar clear guidance in relation to standards for child minders. It should be noted that here it is the person who is to be registered, as distinct from the premises. There were, however, certain well recognised if unwritten standards which had previously been accepted as applicable to foster parents, and these, with some modifications, were approved for child minders. The day-to-day administration of the Act is delegated to the Area Committees.

Services under Section 22 of the National Health Service Act, 1946, have continued without interruption. Before proceeding with the delegated functions under this section, mention should be made of the most important of the non-delegated services—care of the unsupported mother and her child. As mentioned in my report for 1948, plans were well advanced by the end of that year for the transfer of the home at Hampton Wick to a more suitable house in Ealing. The move took place in March, 1949. The new house accommodates twenty-four patients, eleven post-natal (with babies) and thirteen ante-natal. Later in the year, a post-natal hostel for twelve mothers and babies was opened in Willesden, and rapidly proceeded to justify its provision. It has been found necessary to admit a number of cases from the Welfare Department—mothers with young babies rendered homeless through eviction, for whom the Welfare Department has no suitable accommodation. This problem is not confined to Middlesex, and is likely to remain until the housing situation is greatly improved. Full use is also being made of homes provided by voluntary organisations, &c., especially the two in Hendon provided by the British Red Cross Society.

The demand for day nursery provision has not lessened. How far this demand is justifiable is not fully known, and how far the provision of privately-owned nurseries will affect it remains to be seen.

The most noticeable factor that has affected the work of the welfare clinics, and one to which further reference will be made later, has been the continued fall in the birthrate. The total number of births in the County is less by nearly 3,000 than in 1948. A comparison of clinic attendances with those in 1948 cannot be made with accuracy, as figures are only available for the period from 5th July, 1948, but it is apparent that there has been a decrease in the numbers of women attending the Council's ante-natal clinics of just over 2,000. The decrease is fairly uniform in all areas with the exception of Areas 5 and 10, both of which show a small increase.

The attendance of ante-natal patients at local authority clinics is a matter of more than mere interest in numbers. It is of the greatest importance to the patients themselves, for nowhere else will they obtain that particular help and guidance which is invaluable to the mother in connection with her own health, and in connection with the proper rearing of her child. The primary function of the ante-natal clinic is educational, to teach parentcraft in every detail, and supervisory to ensure the maintenance of good health. The hospital ante-natal clinic, with its team of clinical experts, views the expectant mother purely as a patient, to be dealt with as such. As it has little knowledge of her home surroundings, the social aspect, with all its implications, must necessarily receive scant attention. Nor is the general practitioner, faced with innumerable obligations of his practice, in better case. His is not the preventive outlook. He has neither time nor opportunity to instruct and educate his ante-natal patients as they need. He is required, under the maternity medical services, to examine his patient only twice during pregnancy, but co-operation with the local authority services should provide for her a service both efficient and agreeable. This is the end envisaged by the Ministry of Health, but one which may well prove hard to achieve.

The ideal liaison officer for this purpose is the midwife. She is the specialist by virtue of her training, qualifications and experience in both the social and the obstetric aspects of the problem. At the present time, the falling birthrate and the difficult housing situation are throughout the country depriving the midwife of work that she is not only able but anxious to do. Attention was

drawn to this last year. In Middlesex the fact that there is a relatively abundant supply of maternity hospital beds complicates the issue. On the other hand, certain changes in the midwife's technique and routine (for example, the administration of gas and air analgesia for which all midwives on the Council's staff are qualified) now render it impossible for her to attend, with efficiency, the number of cases she had been expected to book in the past. The report of the Working Party on Midwives (published in 1948) recommends that the midwife should book no more than fifty-five cases per annum—just over one per week. This appears to be a good average figure—less than this would prejudice the service in several ways, of which not the least important is the training of the pupil midwife. This is now being undertaken to an increasing extent, giving stimulus to the staff and thus promoting a first-rate spirit of service, and also providing a source of recruitment for the future.

Supervision of the midwifery service is combined with that of the home nursing service. The latter service, a new duty for the Local Health Authority, has encountered certain difficulties, but has already shown in face of increasing demands, shortage of personnel and other vicissitudes, that sense of vocation essential to the performance of its real function.

The Council decided during the year to apply for membership of the Queen's Institute of District Nursing. This development will, it is hoped, aid in the recruitment of trained staff and in the maintenance of a high standard of nursing technique. The possibility of the establishment of a training scheme for home nurses in conjunction with the Queen's Institute will also be explored. There are several suitable residential nurses homes upon which such a scheme could be based. This would also be an aid to recruitment, and the need for increasing the home nursing staff is already only too apparent. The dearth of hospital beds—in particular for the aged and chronic sick—is throwing an increasing burden on the staff. General practitioners are making greater use of the home nurses for such duties as injections of insulin, streptomycin, &c.—small duties in themselves, but such as must be done at stated times and therefore cannot easily be fitted in to the nurses' round. The enrolled assistant nurse is proving herself an able auxiliary, relieving the state-registered nurse of many of the less technical nursing duties.

The health visiting service is still considerably handicapped by shortage of staff, the actual number of health visitors employed being smaller at the end of the year than at the commencement. This is hindering the expansion of their duties to cover the full range of services envisaged in Section 24 of the Act. The deficiency of health visiting staff is being offset as far as possible by the temporary employment of ancillary staff such as clinic nurses and health assistants.

Further consideration has been given to the commencement of a training school for health visitors which it is hoped will stimulate recruitment of fully trained staff, and the Education and Health Committees have agreed to co-operate in such a scheme but the necessary approvals had not been obtained at the close of the year, though a draft scheme has been prepared.

Last but by no means least of the domiciliary services is that provided under Section 29 of the Act—the home help service. The demands here have grown apace and it became evident that the development plan included in the County Council's proposals as approved by the Minister of Health was insufficient to meet the demands and accordingly an amendment of the scheme was approved by the Minister of Health during the year in the following terms :—

> *Part III.—Development Plan.*
>
> *Delete* second paragraph, viz., from the words "It is estimated . . ." to ". . . over the county."
>
> *Substitute* "It is estimated that the equivalent of up to 1,500 whole-time Domestic Helps will be required and it is proposed to recruit staff up to this maximum as and when they are required."

Towards the end of the year the County Council agreed to an immediate increase in establishment from 1,000 to 1,250 in order to meet the increasing need. But the major difficulty is recruitment of permanent staff. Approval has been given in principle to a training or preparation scheme for this service. This will need to be carefully planned in order to enhance the service in the eyes of the public. It is essential that there should be the same spirit of vocation here as exists in the nursing services. The provision of a domestic agency is no duty for any County Council—but the provision of another social service to support those already existing is another matter.

The maternity and child welfare work carried out by the County Council during the year is shown in statistical form in the following tables. In the case of delegated functions, figures for the individual areas are also shown, and serve as some basis of comparison of the extent of the services provided in each area.

Report of the Chief Dental Officer on the Priority Dental Service for the Year 1949

The report for this year is the first full-year report of the Priority Dental Service The report for the preceding year was based on the period 5th July to the end of the year.

It is gratifying to state that the volume of work has been considerable, especially in view of the fact that there were so many changes in personnel. The comparative success of the service is due mainly to the loyalty and co-operative spirit prevailing among the staff.

At the beginning of the year there was a staff of 68 dental officers who devoted approximately 2/11ths of their time to this service, which was the equivalent in whole-time service of 12 dental officers. During the year 25 resigned ; fortunately 17 new appointments were made and the final position was 60 dental officers. At one time in the year the number of staff reached the low figure of 50 and it was feared that nothing short of a debacle in the service would take place. Happily the worst fears were not realised. The dental officers have, of course, in addition to the service given under Section 22 of the National Health Service Act, 1946, to provide dental care for school children under Section 48 (3) of the Education Act, 1944. With such a small staff it was impossible to provide for a full scale dental service for all those mothers and young children who needed it.

Before the operation of the National Health Service Act, 1946, the mothers and children were enjoying reasonable facilities for dental care and it was possible in a number of areas for most expectant mothers examined for the first time at the ante-natal clinics to be immediately referred for dental examination. In this way the desirable aim of mothers regarding the dental examination as a part of the medical examination was rapidly gaining ground and little difficulty was experienced in obtaining their support and co-operation. The serious shortage of staff during the year has unfortunately caused some curtailment of these facilities and, moreover, has prevented a much needed expansion of the service.

In the approved plans for new clinics for the extension of the school health service provision has been made for improving the dental service to be provided under Section 22 of the National Health Service Act. These new dental centres, when established, will be fitted with units and full scale modern dental equipment.

In Ministry of Health Circular 3/49 it is stated in paragraph 2 that the following points should, where appropriate, be covered by the dental report :—

(i) Details should be provided of all forms of dental treatment carried out for mothers (under (*a*) Expectant, (*b*) Nursing), and for children under five years of age.

(ii) Details should also be given under the above heads of numbers (*a*) examined (*b*) needing treatment, (*c*) treated, (*d*) made dentally fit. Complete treatment should be the ultimate aim.

(iii) A note should be included of any field of clinical research into the incidence or prevention of dental disease carried out during the year or of any scheme of dental health education.

With regard to the first point, the dental treatment given to mothers and children is comprehensive. Prosthetic treatment is provided and there are also facilities for X-ray. Many mothers needing X-ray are referred to the general hospitals under the Regional Hospital Boards but in some areas in which dental X-ray machines have been installed this work is done in the central clinics of the County Council. Some of the general hospitals are remote from clinics and mothers have complained of the distance they have to go, and coupled with this is the fact that it invariably takes a few days before skiagrams taken of patients referred to hospitals are received by the dental officers. In many cases an X-ray examination is required immediately. In order to obviate these two disadvantages provision is being made to establish at least one dental X-ray machine in each area. In all central clinics modern gas machines form part of the general equipment so that continuous nasal administration of gas can be readily given. The County Council has a panel of anæsthetists and the dental officers have recourse to the services of these expert anæsthetists as and when required. In addition, there is a full-scale system of conservative dentistry available to every patient and up to April of this year there was a specialist dental officer on the staff to deal with types of treatment presenting special difficulties which could be regarded as coming within the category of specialist dental treatment. It has unfortunately not yet been possible to replace his services but it is hoped that another specialist dental officer will be appointed early in 1950. Furthermore, arrangements have been made for patients requiring dental surgical operations to be referred to selected hospitals for treatment.

In connection with the second request, details of the numbers examined, needing treatment, actually treated and made dentally fit, are included in the statistical report on page 39. The interpretation of " dentally fit " as applied to the service is the same as that set out under the National Health Service (General Dental Services) Regulations, 1948, No. 505, which states " dental fitness means such a reasonable standard of dental efficiency and oral health as is necessary to safeguard general health " and " dentally fit " has a corresponding meaning. The complete treatment of every patient referred who accepts treatment is the ultimate aim. Where practicable there is a follow-up of the case when appointments are not kept.

As regards the third point it has not been possible owing to shortage of staff to carry out any particular item of research into the incidence or prevention of dental disease. Likewise no major

scheme of dental health education has been launched. It would be folly in the present difficult circumstances to encourage more women and children to accept treatment when the existing staff cannot deal with the number already asking for dental attention. The dental staff do, of course, undertake much chairside preventive instruction to encourage home care of the teeth. The Dental Board of the United Kingdom propose, in 1950, to make available more preventive educational material to the local authority health services which, it is understood, will include chairside charts, new posters, a film strip and a special booklet of twenty questions which should be particularly valuable to mothers.

The incidence of dental diseases in mothers is high. The results of the findings at the examinations showed that 92·4 per cent. of expectant and nursing mothers and 81·1 per cent. of young children suffered from dental disease. The universality of dental disease particularly in mothers emphasises the importance of this priority dental service. Expectant and nursing mothers will, of course, have equal rights with the rest of the community to the benefit of the general dental services provided under Section 40 : the intention of Section 22 is clearly to put them in a preferential position and to afford them some guarantee of treatment not given to other classes. It is regrettable that the intention of Section 22 cannot be implemented to the full at the present time owing to the shortage of dental personnel.

Standard Record Card for the Priority Dental Service.—Some time ago the Ministry of Education sent their approved school dental record card to Local Education Authorities for use in the school dental service. This card has proved to be satisfactory and has achieved its main purpose of providing some standardisation in keeping records of inspection and treatment. If a similar dental record card were approved for use for patients examined and treated under Section 22 of the National Health Service Act it would be of material help in ensuring some correlation of dental records throughout the country.

Appointment of Area Dental Officers.—In the County Council's Proposals for the Health Service approved by the Minister of Health, provision was made, subject to the need, for the appointment of an Area Dental Officer to each of the ten Health Areas. The County Council subsequently agreed to an establishment of Area Dental Officers and the following appointments were made :—

Area No.	1	...	...	...	Mr. E. Underhill.
,,	2	...	...	...	Mr. G. S. Williams.
,,	3	...	...	...	Mr. V. S. Sainty.
,,	4	...	...	...	Mr. K. C. B. Webster.
,,	5	...	...	...	Mr. A. G. Brown.
,,	6	...	...	...	Miss A. G. Stewart.
,,	7	...	...	...	Mr. A. H. Millett.
,,	8	...	...	...	Mr. G. M. Davie.
,,	9	...	...	...	Mr. E. E. Lewis.
,,	10	...	...	...	Mr. J. V. Bingay.

The area dental officers took up their appointments in the early part of the year.

Oral Hygienists.—The work of the hygienists is confined to the scaling and cleaning of teeth, the topical application of solutions to tooth surfaces in a caries control scheme and instruction in oral hygiene to patients. The hygienist must work under the responsible direction of the dental officer and can only be engaged to work either in the hospital dental service or in the local authority dental service subject to the approval of the Minister of Health. Employment in a dentist's private practice is not permitted. Their course of training covers three terms each of 14 weeks and successful students obtain the Ministry of Health certificate of proficiency in oral hygiene. Successful candidates who obtain this certificate must be prepared to serve as a hygienist for at least two years in a hospital or clinic or in the public dental service of a local authority. Tuition is free. A national rate of remuneration has still to be worked out. Pending agreement on a national scale the County Council has approved a scale of £315 per annum, plus the appropriate London weighting, hygienists engaged being appointed to the unestablished staff pending the outcome of the experiment.

So far there are only a handful of oral hygienists in this country. Many of them were trained by the Dental Branch of the Royal Air Force who regarded them as being valuable members of the dental team. Hygienists have also proved their worth in the United States of America where they have been working for forty years.

The Minister of Health has approved the employment of three hygienists in Middlesex as a part of the experiment being conducted by the Ministry as to their value and suitability as dental auxiliary workers. Owing to the fact that the training facilities for hygienists were much restricted

—only about 15 can be trained during each course—it was only possible to obtain the services of one part-time oral hygienist. It is expected, however, that two full-time oral hygienists will be appointed in mid-1950 when the next course is completed. While it is as yet too soon to form an opinion as to their real worth to the service there is some indication that they may prove of inestimable value especially in the treatment of mothers. Their work will relieve the dental surgeons of much of the time consuming operation of scaling which practically every mother referred for treatment requires, and so indirectly the hygienists will, to a limited extent, make up for the shortage of dental officers.

The Responsibility of the Service.—The number of women who were examined at ante-natal clinics during the year was 28,797 and those who were post-natally examined totalled 5,775, making a total of 34,572. The number of women examined at the dental clinics was 6,933 which represents 20 per cent. of the total of 34,572 women who attended the County Council's clinics.

There were 185,980 pre-school children entitled to receive dental attention and of this total 97,202 actually attended welfare centres and 8,445 were examined at the dental clinics. The 8,445 children examined represents 4·5 per cent. of the total number of 185,980 pre-school children eligible for dental care. These figures make it abundantly clear that the existing priority service is only touching the fringe of the problem of providing a complete service for mothers and children.

Dental Laboratories.—The County Council has now established two dental laboratories, one at Teddington and the other at Hendon. At the former there is a staff of six, including the senior technician and an apprentice. At Hendon the staff comprises one senior technician and one assistant. There is ample room at Teddington for the accommodation of more staff without alteration to the premises but the Hendon laboratory would have to be considerably enlarged before more staff could be engaged.

A considerable amount of the prosthetic work required to be done was undertaken in the dental laboratories. Further staff will, however, be needed before the whole volume of work can be dealt with at these laboratories. In view of the high cost of equipping dental laboratories it is proposed for the present to centre all the work at Teddington and Hendon and not to set up additional laboratories in other areas.

The year's returns show that about 55 per cent. of the technician's time was devoted to prosthetic work in connection with the school dental service and 45 per cent. to the priority dental service. The higher percentage of time given to the school dental service was because so many removable orthodontic appliances were made.

Statistical Information.—The acceptance rate for treatment was 85·0 per cent. for expectant and nursing mothers and 88·1 per cent. in the case of pre-school children. It is of interest to point out here that the acceptance rate for school children was 80·96 per cent. which does show that the general rate of consent to treatment is high in both services and is an indication of the popularity of the dental services provided. For each expectant and nursing mother treated an average of 4·9 attendances were made and the following treatment was undertaken—2·3 extractions, 2·0 fillings, 1·4 other operations and 0·4 dentures. For each pre-school child treated an average of 2·8 attendances were made and the following treatment was undertaken : 1·3 extractions, 1·4 fillings, 1·1 silver nitrate applications and 0·5 other operations.

SECTION 22.

TABLE 1.

ANTE-NATAL CLINICS PROVIDED BY COUNTY COUNCIL.

Area.	Number of clinics provided at end of year (whether held at infant welfare centres or other premises).	Number of sessions held per month at clinics included in column (i).	Number of women in attendance.		Total number of attendances made by women included in column (iii) during the year 1949.
			Number of women who attended during the year 1949.	Number of women included in column (iii) who had not previously attended an ante-natal clinic during current pregnancy or a post-natal clinic after last confinement.	
	(i)	(ii)	(iii)	(iv)	(v)
1	7	60	2,468	1,969	14,375
2	8	48	1,679	1,140	9,662
3	9	106	4,168	2,714	20,617
4	6	72	2,258	1,717	10,963
5	15	69	2,162	1,804	11,429
6	10	96	4,175	2,750	19,851
7	8	144	3,973	3,015	19,261
8	13	72	2,543	2,054	11,931
9	7	70	2,673	2,018	12,475
10	13	82	2,698	1,975	11,268
COUNTY	96	819	28,797	21,156	141,832

TABLE 2.

POST-NATAL CLINICS PROVIDED BY COUNTY COUNCIL.

Area.	Number of clinics provided at end of year (whether held at infant welfare centres or other premises).	Number of sessions held per month at clinics included in column (i).	Number of women in attendance.		Total number of attendances made by women included in column (iii) during the year 1949.
			Number of women who attended during the year 1949.	Number of women included in column (iii) who had not previously attended an ante-natal clinic during current pregnancy or a post-natal clinic after last confinement.	
	(i)	(ii)	(iii)	(iv)	(v)
1	7	8	926 (—)	838 (—)	2,339 (—)
2	—	—	387 (387)	387 (387)	447 (447)
3	—	—	1,448 (1,448)	1,438 (1,438)	1,491 (1,491)
4	—	—	395 (395)	395 (395)	410 (410)
5	—	—	252 (252)	252 (252)	252 (252)
6	4	9	878 (667)	738 (489)	1,110 (711)
7	—	—	280 (280)	280 (280)	326 (326)
8	1	2	307 (252)	249 (200)	312 (252)
9	1	10	369 (323)	369 (323)	415 (347)
10	1	1	533 (488)	533 (488)	664 (607)
COUNTY	14	30	5,775 (4,492)	5,479 (4,252)	7,766 (4,843)

The figures in brackets indicate the number of women examined post-natally at ante-natal clinics.

Table 3.

Day Nurseries Provided by County Council as at 31st December, 1949.

Area.	Number.	Number of approved places.		Number of children on the register at the end of the year.		Average daily attendance per day nursery during the year.	
		0–2	2–5	0–2	2–5	0–2	2–5
1	7	149	264	112	356	11·6	34·4
2	4	87	133	55	152	8·6	25·7
3	8	146	249	118	246	11·9	26·0
4	10	184	316	139	408	12·1	32·7
5	4	53	167	68	167	13·5	34·2
6	18	409	449	285	568	10·6	26·2
7	11	198	423	149	576	10·2	39·8
8	10	106	426	116	456	8·6	37·1
9	10	187	257	141	332	10·6	28·4
10	12	181	404	147	498	10·7	33·0
County ...	94	1,700	3,088	1,330	3,759	11·0	32·2

TABLE 4.

INFANT WELFARE CENTRES PROVIDED BY COUNTY COUNCIL.

Area	Number of centres provided at the end of year.	Number of welfare sessions held per month at centres in column (i).	Number of children who attended centres in column (i) during the year 1949.	Number of children who first attended the centres during the year 1949, and who on the date of their first attendance were :—		Number of children included in column (iii) who at end of year were :—		Total number of attendances made by children included in column (iii) in the year 1949.	
				Under 1 year of age.	Over 1 year of age.	Under 1 year of age.	Over 1 year of age.	Under 1 year of age.	Over 1 year of age.
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
1	11	86	10,645	2,743	653	1,970	6,557	46,440	28,301
2	14	88·25*	7,422	2,197	469	1,723	3,299	36,084	21,769
3	10	152	10,348	3,212	1,575	3,223	6,676	47,009	20,351
4	15	144	9,870	2,806	588	2,398	6,790	48,989	35,260
5	14	113	8,762	2,622	1,059	2,440	6,322	42,971	15,579
6	11	140	12,313	3,710	426	4,344	7,347	60,756	22,208
7	14	156	10,855	3,532	674	2,705	4,034	54,751	22,700
8	18	164	9,611	2,965	551	2,799	6,812	56,662	30,740
9	8	104	7,818	2,862	602	2,457	4,825	46,475	18,402
10	16	149	9,558	3,027	953	3,037	5,945	52,498	32,962
COUNTY ...	131	1,296·25*	97,202	29,676	7,550	27,096	58,607	492,635	248,272

* The decimal fraction is due to one clinic holding sessions on the first, third and fifth Mondays of each month. The fifth Monday occurred four times during the year, *i.e.*, 4/12 times per month which, to the nearest quarter of a session is, ·25.

Table 5.

Care of Premature Infants, 1949.

Born at home.

Area.	Under 3 lbs.							3–4 lbs.							4–5½ lbs.							Total.						
	Transferred to hospital.	Nursed entirely at home.					Grand Total.	Transferred to hospital.	Nursed entirely at home.					Grand Total.	Transferred to hospital.	Nursed entirely at home.					Grand Total	Transferred to hospital.	Nursed entirely at home.					Grand Total.
		Died in first 24 hours.	Died on 2nd to 7th day.	Died on 8th to 28th day.	Survived 28 days.	Total.			Died in first 24 hours.	Died on 2nd to 7th day.	Died on 8th to 28th day.	Survived 28 days.	Total.			Died in first 24 hours.	Died on 2nd to 7th day.	Died on 8th to 28th day.	Survived 28 days.	Total.			Died in first 24 hours.	Died on 2nd to 7th day.	Died on 8th to 28th day.	Survived 28 days.	Total.	
1	3	2	1	—	—	3	6	5	2	—	1	2	5	10	3	—	1	—	34	35	38	11	4	2	1	36	43	54
2	3	1	1	—	2	4	7	—	—	1	—	1	2	2	3	1	—	1	15	17	20	6	2	2	1	18	23	29
3	2	—	—	—	—	—	2	8	—	—	—	—	—	8	—	1	—	—	33	34	34	10	1	—	—	33	34	44
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	1	1	18	21	23	2	1	1	1	18	21	23
5	—	1	—	—	—	1	1	—	1	—	1	—	2	2	1	4	—	—	14	18	19	1	6	—	1	14	21	22
6	—	2	—	—	—	2	2	—	—	—	—	5	5	5	3	2	—	—	28	30	33	3	4	—	—	33	37	40
7	—	—	—	—	1	1	1	1	—	—	—	2	2	3	2	—	1	—	28	29	31	3	—	1	—	31	32	35
8	—	—	—	—	—	—	—	2	1	—	—	—	1	3	4	2	—	—	35	37	41	6	3	—	—	35	38	44
9	—	1	—	—	—	1	1	—	—	—	—	1	1	1	1	—	—	—	16	16	17	1	1	—	—	17	18	19
10	3	—	—	—	—	—	3	3	1	1	—	1	3	6	5	2	—	1	45	48	53	11	3	1	1	46	51	62
Total ...	11	7	2	—	3	12	23	19	5	2	2	12	21	40	24	13	3	3	266	285	309	54	25	7	5	281	318	372

Born in private nursing homes.

Area.	Under 3 lbs.							3–4 lbs.							4–5½ lbs.							Total.						
	Transferred to hospital.	Nursed entirely in private nursing homes.					Grand Total.	Transferred to hospital.	Nursed entirely in private nursing homes.					Grand Total.	Transferred to hospital.	Nursed entirely in private nursing homes.					Grand Total.	Transferred to hospital.	Nursed entirely in private nursing homes.					Grand Total.
		Died in first 24 hours.	Died on 2nd to 7th day.	Died on 8th to 28th day.	Survived 28 days.	Total.			Died in first 24 hours.	Died on 2nd to 7th day.	Died on 8th to 28th day.	Survived 28 days.	Total.			Died in first 24 hours.	Died on 2nd to 7th day.	Died on 8th to 28th day.	Survived 28 days.	Total.			Died in first 24 hours.	Died on 2nd to 7th day.	Died on 8th to 28th day.	Survived 28 days.	Total.	
1	—	1	—	—	—	1	1	—	—	—	—	1	1	1	—	—	—	—	13	13	13	—	1	—	—	14	15	15
2	—	—	1	—	—	1	1	—	—	—	—	2	2	2	1	1	—	1	9	11	12	1	1	1	1	11	14	15
3	—	—	—	—	—	—	—	—	—	1	—	—	1	1	—	—	—	—	2	2	2	—	—	1	—	2	3	3
4	—	—	—	—	—	—	—	1	—	—	—	1	1	2	—	—	1	1	4	6	6	1	—	1	1	5	7	8
5	—	2	—	—	—	2	2	—	1	—	—	1	2	2	—	—	—	1	26	27	27	—	3	—	1	27	31	31
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	—	—	—	—	2	2	2
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	13	13	—	—	—	—	13	13	13
8	—	—	—	—	—	—	—	1	—	—	—	—	1	1	—	—	—	1	6	7	7	1	—	—	1	6	7	8
9	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	4	4	4	—	—	—	—	5	5	5
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	9	9	10	1	—	—	—	9	9	10
Total ...	—	3	1	—	—	4	4	2	1	1	—	6	8	10	2	1	1	4	88	94	96	4	5	3	4	94	106	110

TABLE 6.

PRIORITY DENTAL SERVICE 1949.

AREA.	EXPECTANT AND NURSING MOTHERS.												CHILDREN UNDER FIVE YEARS.										
	Inspected.	Referred for treatment.	Actually treated.	Total attendances.	Extractions.	Fillings.	Anæsthetics.		Other operations including scaling.	X-Ray.	Denture dressings.	Dentures fitted.	Inspected.	Referred for treatment.	Actually treated.	Total attendances.	Extractions.	Fillings.	Silver nitrate dressings.	Anæsthetics.		Other operations.	X-Ray.
							Local.	General.												Local.	General.		
1	946	928	495	1,417	1,339	329	126	334	335	7	503	179	1,288	1,260	718	991	1,090	70	1,421	44	560	12	—
2	408	367	398	1,866	804	910	132	135	839	25	538	177	686	536	569	1,352	326	764	792	6	168	286	1
3	1,113	971	756	1,953	940	985	316	152	475	20	460	176	698	639	679	1,527	777	676	843	141	212	604	1
4	548	489	477	2,715	1,057	1,066	204	229	685	28	712	247	731	549	565	1,851	752	866	211	10	392	190	4
5	373	370	316	1,258	767	520	63	178	345	1	192	50	560	532	465	1,127	566	640	481	5	206	175	—
6	923	906	717	2,920	1,218	1,753	250	282	1,170	18	25	90	1,386	1,244	1,006	3,143	1,272	1,852	562	13	530	424	—
7	735	637	658	2,863	1,336	1,033	166	333	545	18	641	222	753	532	580	1,461	1,082	590	388	13	385	407	2
8	569	528	449	2,897	1,241	1,075	368	224	613	36	772	288	641	401	332	1,356	394	930	325	6	201	219	12
9	661	644	705	3,545	1,414	1,422	117	427	1,133	85	822	276	900	702	696	2,161	923	882	1,303	23	454	303	3
10	657	569	478	5,079	2,299	1,958	964	355	1,276	79	1,348	556	802	455	424	2,068	810	1,002	474	63	379	378	—
COUNTY ...	6,933	6,409	5,449	26,513	12,415	11,051	2,706	2,649	7,416	317	6,013	2,261	8,445	6,850	6,034	17,037	7,992	8,272	6,800	324	3,487	2,998	23

Table 7.

Mother and Baby Homes.

Name and address of home or hostel.	Number of beds.				Average length of stay.	
	Total beds (excluding maternity and labour and cots).	Maternity (excluding labour and isolation).	Labour beds.	Cots.	Ante-natal.	Post-natal.
A.—Provided by the County Council.						
Amherst Lodge, 47, Amherst Road, Ealing, W.13	24	—	—	11	6 weeks	3 months.
167, Willesden Lane, Kilburn, N.W.6	12	—	—	12	—	4 months.
B.—Provided or used by voluntary organisations.						
"Maryland," The Downage, Hendon, N.W.4	14	—	—	14	—	6 weeks.
"The Heath," 16, The Park, Golders Green, N.W.11 ...	14	—	—	—	6 weeks	—

Total number of women admitted during the year to homes and hostels shown above (ignoring re-admissions after confinement) 469

Number of admissions for which the County Council was responsible ... 469

Number of cases sent by the County Council during the year to mother and baby homes other than those mentioned above :—

Expectant mothers 157

Post-natal cases 35

SECTION 23.

TABLE 1.

Number of midwives practising in the area of the Local Supervising Authority at 31st December, 1949.

Area.	Midwives employed by the County Council.			Midwives employed by voluntary organisations.						Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act.			Midwives in private practice (including midwives employed in nursing homes).			Totals.		
				Under arrangements with the Local Health Authority, in pursuance of Section 23 of the National Health Service Act.			Otherwise (including hospitals not transferred to the Minister under the National Health Service Act).											
	Domiciliary Midwives.	Midwives in Institutions.	Total.	Domiciliary Midwives.	Midwives in Institutions.	Total.	Domiciliary Midwives.	Midwives in Institutions.	Total.	Domiciliary Midwives.	Midwives in Institutions.	Total.	Domiciliary Midwives.	Midwives in Institutions.	Total.	Domiciliary Midwives.	Midwives in Institutions.	Total.
1	27 (1)	—	27 (1)	—	—	—	—	—	—	—	88	88	2	4	6	29 (1)	92	121 (1)
2	10 (1) [1]	—	10 (1) [1]	—	—	—	—	—	—	—	3	3	10	16	26	20 (1) [1]	19	39 (1) [1]
3	18 (1)	—	18 (1)	—	—	—	—	—	—	4†	7	11	—	3	3	22 (1)	10	32 (1)
4	12 (2) [6]	—	12 (2) [6]	—	—	—	1*	—	1*	—	34	34	9	5	14	22 (2) [6]	39	61 (2) [6]
5	17 (1)	—	17 (1)	—	—	—	—	—	—	—	—	—	6	27	33	23 (1)	27	50 (1)
6	15 (3) [1]	—	15 (3) [1]	—	—	—	—	—	—	3‡	40	43	1	1	2	19 (3) [1]	41	60 (3) [1]
7	13 (1)	—	13 (1)	—	—	—	—	—	—	7‡	15	22	—	22	22	20 (1)	37	57 (1)
8	21 (1)	—	21 (1)	—	—	—	—	—	—	—	31	31	6	7	13	27 (1)	38	65 (1)
9	12 (1)	—	12 (1)	—	—	—	—	—	—	—	54	54	6	3	9	18 (1)	57	75 (1)
10	22 (1)	—	22 (1)	—	—	—	—	9	9	—	—	—	—	12	12	22 (1)	21	43 (1)
COUNTY	167 (13) [8]	—	167 (13) [8]	—	—	—	1	9	10	14	272	286	40	100	140	222 (13) [8]	381	603 (13) [8]

The figures in parenthesis ( ) show the number of supervisors. The figures in brackets [ ] relate to part-time midwives.

* Midwife employed by Mill Hill Nursing Association. † Midwives employed by the City of London Maternity Hospital. ‡ Midwives employed by Queen Charlotte's Hospital.

TABLE 2.

Number of maternity cases in the area of the Local Supervising Authority attended by midwives during the year ended 31st December, 1949.

Area.	Midwives employed by the County Council.						Midwives employed by voluntary organisations.										Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act.				Midwives in private practice (including midwives employed in nursing homes).				Totals.					
							Under arrangements with the Local Health Authority, in pursuance of Section 23 of the National Health Service Act.						Otherwise (including hospitals not transferred to the Minister under the National Health Service Act).																			
	Domiciliary Cases.		Cases in Institutions.		Total.		Domiciliary Cases.		Cases in Institutions.		Total.		Domiciliary Cases.		Cases in Institutions.		Total.		Domiciliary Cases.		Cases in Institutions.		Total.		Domiciliary Cases.		Cases in Institutions.		Total.		Domiciliary Cases.		Cases in Institutions.		Total.	
	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.
1	851	310	—	—	851	310	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,694	—	2,694	—	—	2	75	46	75	48	851	312	2,769	46	3,620	358
2	332	208	—	—	332	208	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	494	—	—	9	494	341	702	—	—	341	702
3	771	174	—	—	771	174	—	—	—	—	—	—	—	—	—	—	—	—	2	—	617	16	619	16	19	—	—	169	19	169	792	174	617	185	1,409	359
4	480	150	—	—	480	150	—	—	—	—	—	—	—	6	—	—	—	6	—	—	1,171	736	1,171	736	—	10	51	184	51	194	480	166	1,222	920	1,702	1,086
5	616	182	—	—	616	182	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	52	747	17	750	69	619	234	747	17	1,366	251
6	684	122	—	—	684	122	86	128	—	—	86	128	—	—	—	—	—	—	—	—	2,493	389	2,493	389	—	7	16	8	16	15	770	257	2,509	397	3,279	654
7	413	102	—	—	413	102	—	—	—	—	—	—	—	—	—	—	—	—	333	19	1,163	134	1,496	153	—	—	69	384	69	384	746	121	1,232	518	1,978	639
8	804	221	—	—	804	221	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,083	111	2,083	111	31	35	42	113	73	148	835	256	2,125	224	2,960	480
9	379	162	—	—	379	162	—	—	—	—	—	—	—	—	—	—	—	—	134	16	3,169	—	3,303	16	49	15	50	186	99	201	562	193	3,219	186	3,781	379
10	635	377	—	—	635	377	—	—	—	—	—	—	—	—	—	—	—	—	—	—	613	48	613	48	3	2	31	210	34	212	638	379	644	258	1,282	637
Total ...	5,965	2,008	—	—	5,965	2,008	86	128	—	—	86	128	—	6	—	—	—	6	469	35	14,003	1,434	14,472	1,469	114	617	1,081	1,317	1,195	1,934	6,634	2,794	15,084	2,751	21,718	5,545

1. As midwives.

2. As maternity nurses.

TABLE 3.

ADMINISTRATION OF ANALGESICS.

Area.	Number of midwives in practice in the County qualified to administer analgesics in accordance with the requirements of the Central Midwives Board.			Number of sets of apparatus for the administration of analgesics in use by domiciliary midwives employed by the County Council or employed by voluntary organisations in the County.	Number of cases in which analgesics were administered by midwives in domiciliary practice during the year 1949.
	Domiciliary.	In Institutions.	Total.		
1	27	45	72	15	674
2	9	3	12	10	589
3	23	7	30	12	392
4	19	39	58	16	522
5	19	7	26	17	613
6	19	39	58	13	544
7	20	29	49	19	665
8	26	21	47	26	620
9	13	52	65	16	370
10	22	17	39	21	602
COUNTY ...	197	259	456	165	5,591

HEALTH VISITING.

Area.	Number of health visitors employed at end of year.		Equivalent of whole-time services devoted by health visitors included in columns (i) and (ii) to health visiting (all classes including attendance at infant welfare centres.)	Number of visits paid by health visitors included in columns (i) and (ii) during the year 1949.							
				Expectant mothers.		Children under 1 year of age.		Children between the ages of 1 and 5.		Other classes.	
	Whole-time on health visiting.	Part-time on health visiting.		First visits.	Total visits.	First visits.	Total visits.	First visits.	Total visits.	First visits.	Total visits.
	(i)	(ii)	(iii)								
1	—	22 (2)	14·5	596	790	3,524	12,591	919	20,227	923	4,392
2	—	20 (2)	11·0	751	1,494	2,252	8,130	184	14,858	595	2,208
3	—	25 (2)	20·5	2,054	4,829	3,472	11,928	38	15,990	1,540	3,220
4	—	24 (2)	14·9	1,149	1,477	2,942	9,198	645	10,833	863	2,144
5	—	17 (2)	13·0	1,085	1,413	4,130	9,427	773	10,465	549	1,153
6	—	37 (2)	23·35	2,966	5,318	5,013	17,488	681	23,624	4,087	13,774
7	1	25 (2)	19·0	1,462	1,939	4,108	12,596	546	14,694	1,263	2,134
8	—	25 (2)	19·2	1,435	2,688	3,442	14,959	300	15,866	495	1,792
9	—	25 (2)	15·4	706	1,062	3,174	8,282	1,720	10,102	1,227	2,747
10	—	28 (2)	19·0	921	1,767	3,866	16,062	401	19,994	231	3,152
COUNTY ...	1	248 (20)	169·85	13,125	22,777	35,923	120,661	6,207	156,653	11,773	36,716

Figures in parenthesis relate to superintendents and deputy superintendents included in the total.

SECTION 25.

HOME NURSING.

Area.	Employed by.	Number of home nurses employed at 31st December, 1949.		Equivalent of whole-time services devoted by home nurses included in columns (i) and (ii) to home nursing.	Number of visits paid by home nurses included in columns (i) and (ii) during the year 1949.	Number of cases attended by home nurses included in columns (i) and (ii) during the year 1949.
		Whole-time on home nursing.	Part-time on home nursing.			
		(i)	(ii)	(iii)	(iv)	(v)
1	C.C.	11	12 (1)	16·2	49,826	2,072
2	C.C.	20	7 (1)	22·9	53,730	2,537
3	C.C.	11	9 (1)	16·0	40,076	2,320
4	C.C.	12	20 (1)	22·0	68,716	3,493
5	C.C.	16	4 (3)	18·0	45,090	3,918
6	C.C.	10	5 (1)	11·0	27,197	1,584
	V.O.	21	5	24·0	83,762	3,096
7	C.C.	30	12 (1)	34·0	84,212	4,330
8	C.C.	25	2 (1)	25·44	63,829	3,012
9	C.C.	24	4 (1)	25·5	57,191	2,302
10	C.C.	21	5 (1)	22·75	56,724	2,931
Totals ...	C.C.	180	80 (12)	213·79	546,591	28,499
	V.O.	21	5	24·0	83,762	3,096

C.C.—Employed by the County Council.
V.O.—Employed by Voluntary Organisations by agreement with the Authority.
The figures in parenthesis relate to supervisors which are included in the total.

SECTION 29.

DOMESTIC HELP.

Area.	Number of home helps employed at 31st December, 1949.		Number of cases in which domestic help was provided during the year 1949.
	Whole-time.	Part-time.	
1	22	135	634
2	13	76	1,043
3	22	139	1,432
4	19	94	1,110
5	17	94	1,199
6	9	148	1,655
7	19	164	1,432
8	49	87	953
9	44	133	1,394
10	25	99	970
COUNTY	239	1,169	11,822

PREVENTION OF ILLNESS, CARE AND AFTER CARE.

Tuberculosis and Venereal Diseases.—Reports in connection with the services provided by the County Council will be found on pages 15 and 25 of this report.

Foot Clinics.—The chiropody services provided in Edmonton at one of the Council's clinics and in Brentford and Chiswick by privately practising chiropodists continued during the year.

Recuperative Holiday Homes.—During the year the County Council accepted financial liability for the maintenance of 1,431 persons in recuperative holiday homes; 1,176 were admitted to such homes; the remaining 255 were cancelled or withdrawn. Of the 1,176 cases admitted, 1,008 were adults and 168 were children under school age. Children of school age were dealt with under Education powers.

Applications were received from the following sources :—

724 referred by hospitals.
463 referred by general practitioners.
244 from other sources (voluntary associations, etc.).

Loan of Nursing Equipment.—In addition to the loan of the smaller items of nursing equipment which the County Council had purchased from the previous district nursing associations, the County Council received 71 applications for the loan of larger items of equipment or equipment not otherwise available to the public. Thirty-nine patients were loaned such eqiupment and the remaining 32 patients either subsequently withdrew their applications or were referred to other local authorities or the hospital service. All equipment was loaned free of charge.

Health Education.—Ability to impart the knowledge they possess is of particular importance to public health workers and is indeed the chief function of a health visitor and the basis of all health education. Difficulty in the imparting of knowledge may be due to faulty power of self-expression on the part of the possessor, but probably just as often to inability or reluctance on the part of the intended recipient to assimilate it.

With a view to learning about the personal experiences of acknowledged experts in the instruction of the public through various media and to discuss the adaptation of any available special techniques to health education problems, arrangements were made for a symposium on the principles and techniques of informing the public. A synopsis of the addresses made is set out on pages 61 to 75. The meeting was held at The London School of Hygiene and Tropical Medicine and some 120 members of the County Council's medical, dental and health visiting staff attended.

MENTAL HEALTH.

Administration.

The County Council's mental health functions are dealt with under the direction of a Mental Health Sub-Committee of the Health Committee consisting of members of the Health Committee, of whom at least two-thirds are members of the County Council. This sub-committee meets monthly.

The Council's mental health services are operated under the direction of the County Medical Officer who is assisted by a Principal Assistant Medical Officer with special experience in mental health work. During the year an additional medical officer with mental health experience was appointed to assist in the work. There are also 27 Duly Authorised Officers most of whom have had previous experience in mental health work in the capacity of Relieving Officers, and four Lady Supervision Officers who are experienced in supervising mentally defective patients in the community. Each of the four occupation centres mentioned below is staffed by a supervisor and an assistant supervisor who have had previous experience of this work and who have also attended courses and lectures as later indicated together with the necessary ancillary staff according to size of the centre.

The Council's Duly Authorised Officers and Lady Supervision Officers carry out the supervision, on behalf of Regional Hospital Boards and Hospital Management Committees, of mentally defective patients on licence from Institutions, particulars of which are given below.

Work in connection with the care and after-care of persons suffering from mental illness was also carried out on behalf of the County Council by the National Association for Mental Health which employed the equivalent of two whole-time psychiatric social workers for this purpose.

During the year the mental health technical staff attended courses of lectures on various aspects of mental health work which were given by the Principal Assistant Medical Officer in charge of the service. They also attended a series of lectures arranged by the National Association for Mental Health, and, with the co-operation of the Hospital Management Committee of the Harperbury Hospital, Shenley, arrangements were made over an extended period for a number of these officers to spend a week at the Harperbury Hospital in order to study the work carried on at a mental deficiency institution.

Mental Health Work undertaken in the Community.

This can be considered under the following headings :—

(*a*) *National Health Service Act*, 1946.—Under Section 28 (1) of the National Health Service Act, 1946, the Local Health Authority has the power, and, to the extent that the Minister directs, the duty to make arrangements for the care and after-care of persons suffering from mental illness or mental defectiveness.

Action under this section in the case of mental illness has so far been mainly in the hands of the National Association for Mental Health, acting as agent for the County Council. The average monthly case load of patients dealt with by the Association during the year has been 139.

(*b*) *Under the Lunacy and Mental Treatment Acts*, 1890–1930.—The mental health service under these Acts, was, in July, 1948, organised on an Area basis coinciding with the ten local health areas for other health services provided under Part III of the National Health Service Act, and it has been found convenient to retain this arrangement. Direction of this service, however, has not been delegated to the Area Health Committees and does not come under the control of the Area medical officers, but is administered from the central office.

The particulars of visits, &c., of the 27 Duly Authorised Officers who are engaged in this work are as follows :—

Total number of visits made by Duly Authorised Officers for all areas ...	10,277
Admissions to mental hospital by Duly Authorised Officers and later certified	1,282
Admissions to mental hospital by Duly Authorised Officers under temporary certification	189
Total number of visits to voluntary patients and later assisted by Duly Authorised Officers to enter mental hospitals	692

(*c*) *Under the Mental Deficiency Acts*, 1913–1938.—The following paragraphs set out statistical information relating to work carried out under the Mental Deficiency Acts, 1913–1938 :—

(1) *Ascertainment*—1949.

	Males.	*Females.*	*Total.*
(*a*) Cases reported by Local Education Authorities (Section 57, Education Act, 1944)—			
(i) Under Section 57 (3)	74	48	122
(ii) Under Section 57 (5)	34	31	65
(*b*) Other cases reported during 1949 and ascertained to be "subject to be dealt with"	49	56	105
Total cases ascertained to be "subject to be dealt with" during the year	157	135	292
(*c*) Other cases reported during 1949 who are not at present "subject to be dealt with," but for whom the Local Health Authority may subsequently become liable	61	55	116
Total number of cases reported during the year ...	218	190	408

(2) *Disposal of cases reported during the year.*

	Males.	*Females.*	*Total.*
(*a*) Cases ascertained to be "subject to be dealt with"—			
(i) Admitted to Institutions (by order)	8	11	19
(ii) Placed under guardianship (by order)	3	—	3
(iii) Taken to "places of safety"	7	6	13
(iv) Placed under statutory supervision	107	90	197
(v) Died or removed from area	1	2	3
(vi) Action not yet taken	21	18	39
(vii) Action already taken before L.E.A. notification ...	10	8	18
(*b*) Cases not at present "subject to be dealt with"—			
(i) Placed under voluntary supervision	4	9	13
(ii) Later found not to be defective	23	31	54
(iii) Died or removed from area	3	—	3
(iv) Action unnecessary	17	6	23
(v) Action not yet taken	14	9	23
Total	218	190	408

(3) *Particulars of mental defectives in Middlesex as at 1st January*, 1950.

	Males.	*Females.*	*Total.*
Number of mental defectives ascertained to be "subject to be dealt with"—			
(*a*) Under guardianship (under orders)			
Under 16 years of age	31	18	49
Aged 16 years and over	230	280	510
(*b*) In "places of safety"	26	31	57
(*c*) Under statutory supervision (excluding cases on licences)—			
Under 16 years of age	441	231	672
Aged 16 years and over	614	429	1,043
(*d*) Action not yet taken under any one of the above headings	21	18	39
Number of cases included in (*a*) to (*d*) above, awaiting removal to an institution	178	116	294
(*e*) Number of patients under voluntary supervision—			
Under 16 years of age	10	12	22
Aged 16 years and over	585	484	1,069

(4) *Number of mental defectives under community care including voluntary supervision or in "places of safety" on 1st January*, 1949, *who have ceased to be under community care or in "places of safety" during* 1949.

(*a*) Admitted to institution	82
(*b*) Ceased to be under care	30
(*c*) Died or removed from area	141
Total	253

(5) *Number of mental defectives known to the local health authority.*

(*a*) Who have given birth to children during 1949—	
(i) After marriage	—
(ii) While unmarried	5

	Males.	*Females.*
(*b*) Who have married during 1949	15	9

Guardianship.

Admissions.—Fifteen petitions were presented for orders for cases to be admitted to guardianship.

Transfers.—Thirty-three were transferred between guardians under varying order under Section 7 (2) of the Act.

Removals.—Twenty-four were removed fron guardianship to certified institutions under Section 7 (1) of the Act. Ten were transferred from institutions to guardianship under Amendment Act, 1925.

Deaths.—Two patients died during the year.

Leaves of absence.—During the year, 32 patients left their certified abode of guardianship and were given leave of absence to other addresses.

Discharges.—Twenty patients were discharged from their orders under the Mental Deficiency Act for the following reasons :—

8 by authority of the Board of Control.
11 by operation of law.
1 by the Middlesex Visitors.

Revision of Orders.—In accordance with the requirements of the Act and Regulations, 241 guardianship detention orders were reconsidered and continuation orders issued by the Board of Control.

Supervision.

Patients are placed under "supervision" in their own homes if the conditions are sufficiently satisfactory to render it unnecessary for them to be placed under "orders" and where maintenance allowances are not required. The total number of cases under supervision as at 1st January, 1950, are shown in paragraph 3 above.

Licence.—During the year the Local Health Authority has carried out the supervision of patients on licence from regional hospital board institutions to addresses within the County and progress reports have been furnished to the various hospital management committees. One hundred patients were on licence "on trial" from institutions as on the 1st January, 1950.

Occupation Centres.—The Mental Deficiency Act of 1927, imposed a duty on Local Authorities to provide occupation and training for patients living in the community and one of the most useful means of doing this is by the provision of centres in convenient districts in the County where patients can attend daily.

The County Council has approved a scheme for the provision of 11 occupation centres within the County. An occupation centre organiser was appointed and two centres were opened in 1947, one at Twickenham and one at Wealdstone: two further centres being opened during 1948 at Brentford and Tottenham. Arrangements are now completed for the opening of a fifth centre, Villiers Hall, Villiers Road, Uxbridge, which will commence on the 2nd January, 1950, and will accommodate 36 patients. The numbers attending the centres at present are as follows:—

Wealdstone Centre	65
Tottenham Centre	30
Brentford Centre	60
Twickenham Centre	52

Institution.

Place of Safety Cases.—Place of safety cases are those dealt with in emergency or for special reasons, and are detained pending presentation of petitions for orders for their admission to certified institutions. Such cases are now chargeable to the regional hospital boards. During 1949, 102 patients were admitted to places of safety.

Detention Orders and Number of Petition Presentations to Justices (Institutions).—All the defectives sent to certified institutions are detained under orders signed by Justices of the Peace upon presentations of petitions and this duty has to be carried out by officers of the local health authority.

During 1949, the number of petition presentations to Justices of the Peace for institutional detention was 134.

Varying Orders (All Classes).—Varying Orders are obtained to authorise change of guardian (in guardianship cases), or by transfer from institution to guardianship or *vice versa*. During the year, 67 varying orders were considered by Justices of the Peace upon application made by officers of the health authority.

Conveyances.—It is the duty of the Local Authority to carry out the conveyance of all defectives both to and from institutions, guardianship, &c. Conveyance of new order cases must be carried out within prescribed times of the date of the order, otherwise the order would lapse.

Up to the operation of the National Health Service Act, conveyance of defectives was generally carried out by mental deficiency enquiry officers in their own cars. As from the 5th July, 1948, however, arrangements were made for this service to be carried out in some cases by the County Council's ambulance service, provided under the National Health Service Act.

Discharges.—During 1949 35 patients were discharged from their order, from the registers of certified institutions.

Deaths.—During 1949 there were 39 deaths in certified institutions.

Holiday Leaves of Absence.—Patients in certified institutions may be allowed short periods of leave of absence to the care of relatives or friends and investigations have to be made by officers of the County Council to see that the means of care, control and supervision are adequate for such leave of absence. During 1949, 408 reports were made by the health authority's officers for the regional hospital boards.

Revision of Orders—Institution Cases.—In all institution cases their orders are periodically revised at specified times in accordance with statutory regulations and visited by the special visitors appointed under Section 11 of the Mental Deficiency Act; in all cases up-to-date reports on the home conditions, &c., have to be furnished to these visitors by officers of the County Council. During 1949, 682 such reports were furnished.

INSPECTION AND SUPERVISION OF FOOD

Milk Production and Distribution.

On October 1st, 1949, the Food and Drugs (Milk and Dairies) Act, 1944, came into force, together with the Milk (Special Designations) Act, 1949. Three sets of regulations made under these acts came into operation on the same date :—

(i) Milk and Dairies Regulations, 1949.

(ii) Milk (Special Designation) (Raw Milk) Regulations, 1949.

(iii) Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949.

These acts and regulations have involved changes of the most sweeping description in the administration of law relating to milk supply and govern the hygiene of milk production and distribution from cowshed to consumer.

Milk and Dairies Regulations, 1949.

These regulations apply to both designated and non-designated milks and have been made jointly by the Ministers of Health, Agriculture and Fisheries, and Food, and re-enact with amendments the Milk and Dairies Regulations, 1926–1943.

The most important alterations in administration are :—

(1) The transfer from local authorities to the Ministry of Agriculture and Fisheries of the responsibility for the registration of dairy farms.

(2) The transfer from local authorities to the Ministry of Agriculture and Fisheries of the responsibility for execution and enforcement of the regulations on dairy farms (except in so far as they relate to diseases communicable to man).

The Minister has power to refuse or cancel a registration if he is satisfied that the regulations cannot be complied with. This is a power which previously was denied to local authorities.

Milk (Special Designation) (Raw Milk) Regulations, 1949.

Under these regulations, also made jointly by the three Ministers previously mentioned and which re-enact with amendments the provisions of the Milk (Special Designation) Regulations, 1936–1948, relating to raw milk, responsibility for the granting of licences for the production of tuberculin tested and accredited milks is transferred from County Councils and County Borough Councils to the Ministry of Agriculture and Fisheries. The designation "Accredited" however, will only remain in being for a limited period and will not be permitted after October 1st, 1954.

Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949.

The Ministry of Agriculture and Fisheries is not concerned with these regulations which re-enact with amendments the Milk (Special Designation) Regulations, 1936–1948 so far as they relate to pasteurised milk.

The designations authorised under the regulations are "Pasteurised" and "Sterilised," the latter being a new designation which has been officially recognised in anticipation of the time when areas are "specified" under the Milk (Special Designation) Act, 1949.

Responsibility for the granting of dealers' licences to pasteurise or sterilise milk has been transferred from local authorities to food and drugs authorities, *i.e.*, in Middlesex, the County Council.

In Middlesex, the County Council's powers as food and drugs authority are administered through the Public Control department and further details of the nature and effect of the new regulations are shown in a statement of the chief officer of that department which appears later in this report.

From the foregoing it will be appreciated that the County Council is no longer responsible for the granting of licences to produce "Tuberculin Tested" or "Accredited" milk, this function now vesting in the Minister of Agriculture and Fisheries. This Minister has entrusted the day-to-day administration of the regulations to Milk Sub-Committees of the County Agricultural Executive Committees. In Middlesex some liaison in respect of the very important aspects of milk production relating to human health has been secured by the appointment of the County Medical Officer of Health as a member of the Milk Sub-Committee of the Middlesex Agricultural Executive Committee.

During 1949 licences for the production of tuberculin tested milk were granted to 29 farmers; 27 licences were issued by the County Council under the Milk (Special Designations) Orders, 1936–1948 and two by the Ministry of Agriculture and Fisheries under the Milk (Special Designations) (Raw Milk) Regulations, 1949. Twenty-one farmers received licences from the County Council for the production of "Accredited Milk. Twenty-three of the herds belonging to holders of "T.T." licences were also attested under the scheme of the Ministry of Agriculture and Fisheries, Animal Health Division.

As mentioned above local authorities retain their powers connected with milk production in so far as they relate to diseases communicable to man. An important aspect of this work which is carried out by the County Council is the sampling of milk with a view to examination for the presence of tubercle bacilli. Samples of milk are taken by inspectors of the Public Control Department either in course of retail or at the farms of origin, when these are situated in Middlesex, and submitted to examination in the pathological laboratory of Harefield Hospital. Prior to 1943, these examinations were carried out at the Lister Institute of Preventive Medicine and Harefield Hospital commenced operations in May, 1943. The following tables show the results which have been obtained for each of the last 10 years :—

Year.	Number of samples for which a definite result was obtained.	Number containing living tubercle bacilli.	Percentage of tubercle-infected milk.
1940	267	19	7·1
1941	285	16	5·6
1942 (January to June)	136	6	4·4
1943 (May to December)	256	4	1·6
1944	384	17	4·4
1945	376	8	2·1
1946	391	17	4·3
1947	352	10	2·8
1948	384	12	3·1
1949	384	3	0·7

Two of the three infected samples were produced in Middlesex. A diseased animal was traced at one of the farms concerned in Middlesex, and the cow was slaughtered.

The routine veterinary inspection of Middlesex herds is carried out by officials of the Ministry of Agriculture. The Divisional Inspector of the Ministry furnished the County Council with information as to the results of veterinary inspections and tuberculin tests of Middlesex herds. The figures for the past six years are set out in the table below :—

Year.	Number of clinical examinations of bovine animals.	Number found in which tuberculosis was suspected.	Number slaughtered.	Number in which diagnosis was not confirmed.
1944	5,279	20	19	1
1945	5,507	18	17	1
1946	4,589	19	19	—
1947	2,635	8	7	1
1948	5,486	9	8	1
1949	6,172	5	5	—

It will be noted that though there was a further increase in the number of clinical examinations made, there was a reduction in the number of cases of tuberculosis found.

Defence Regulation 55G.

Heat-Treated Milk (Prescribed Tests) Order, 1944.

The Milk (Special Designations) Act, 1949.

The Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949.

I am indebted to the Chief Officer of the Public Control Department for the following report on the operation of the various regulations relating to milk production and distribution which affected his department during the year :—

"The first stage in the Government's policy to ensure the supply of safe milk was made under a Defence Regulation and the Heat-Treated Milk Order, which required milk described as 'heat-treated' or 'sterilised' to conform with prescribed tests for keeping quality and the adequacy of the heat-treatment. To processors who so treated and labelled their milk a bonus was allowed and in co-operation with the Ministry of Food the Department had for the past four or five years taken samples for the purpose of the tests.

From the 1st October, 1949, the Special Designations Act and Regulations took the matter a step further. It provided that in respect of heat-treated milk the only lawful special designations which might be used were 'sterilised' or 'pasteurised.' It provided that processors intending to apply either designation to the milk which they processed should be licensed with the County Council. The provision for Dealer's (Steriliser's) licences was, by this provision, introduced for the first time. Before the 1st October, Dealer's (Pasteuriser's) licences were issued in Middlesex by the local district authorities. The County Council was also solely responsible for seeing that any milk sold under a special designation, whether a heat-treated milk or raw milk, was sold by a person licensed with the appropriate authority. It should be noted that the County Council is only responsible for the grant of licences to processors in respect of their dealings from the processing premises and the licences which must be held by persons dealing in the same milk from other premises are granted by the local district authority in which the premises are situate.

The regulations with which these processors of pasteurised or sterilised milk must conform are many and stringent and deal not only with the construction and efficiency of the plant but also with the construction and hygienic condition of the premises, cleansing of apparatus and containers, the labelling of containers and the like. It was necessary for the Council to lay down requirements for the provision of thermometers (some recording processing temperatures continuously on a chart subsequently kept for inspection by officers of the Department) and pressure gauges, at appropriate parts in various types of apparatus to ensure not only that the processor might know at any time the temperature of the milk being treated and ensure that the work was properly carried out, but also to enable inspecting officers to check that the work was being done properly. The essence of the pasteurising process is that the milk must be retained for a minimum period within a restricted range of high temperature and immediately afterwards cooled to a temperature of 50° F. or less. The essence of the sterilising process is that after filtration or clarification the milk is homogenised, heated to and maintained at a temperature of at least 212° F. for a period which enables it to pass a test known as the turbidity test to prove adequate sterilisation.

On the 1st October, 1949, 29 pasteuriser's licences granted by Borough or District Councils under the former regulations were transferred to the County Council. In December, three of the new steriliser's licences were granted for the first time by the County Council and in this month the annual renewal of twenty-seven of the existing pasteuriser's licences and of the three steriliser's licences, as well as five new applications for a pasteuriser's licence and one new application for a steriliser's licence were considered. During the last months of 1949, the senior officers of the Department had made many inspections of all processors' plants and given much advice as to necessary alterations needed to conform with the Regulations. It was found that there was much diversity in the standard of compliance and of the total of 32 applications for pasteuriser's licences then considered, 21 could be granted and 11 were at the time refused for such deficiencies as lack of adequate thermometers, milk coolers without proper dust covers, apparatus otherwise inadequately protected from contamination, direct communication between the processing room and fuel stores and boiler houses, or the like. One of the four applications for a steriliser's licence was also at this time refused. In some cases processors who had their licences granted were only able to achieve their object because of considerable improvement in the condition of their premises or plant in the last few months of the year. Those who had their licence refused at this time have subsequently made alterations which have conformed with the required standard and were granted licences. The effect of the change in the law has been salutary in securing a sound common standard of processing throughout the County. The duties have involved a very considerable amount of work by the senior officers of my Department and in addition to the many visits for inspections and advice, samples are regularly taken of the processors and a total of 1,317 were submitted to test during the year. Of these 117 failed. In each case of failure the processor was visited and the reason for inadequacy in heat-treatment

investigated and advice given to obviate recurrence. The total number of samples taken of heat-treated milk was 400 more than in the previous year and it remains only to express a tribute to the co-operation of the Public Health Laboratory Service and the King Edward Memorial Hospital Laboratory at Ealing for accepting these samples for test free of charge."

The two following tables set out particulars of samples of milk taken under Defence Regulation 55G and the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, respectively.

PARTICULARS OF SAMPLES OF MILK PROCURED BY OFFICERS OF THE PUBLIC CONTROL DEPARTMENT DURING THE PERIOD JANUARY 1ST TO SEPTEMBER 30TH, 1949, IN PURSUANCE OF REGULATION 55G OF THE DEFENCE (GENERAL) REGULATIONS, 1939.

Description.	Passed.	Failed.	Number of samples examined.
Pasteurised Milk—			
Phosphatase test	405	8	413
Methylene blue test	343	48	
Tuberculin Tested (Pasteurised) Milk—			
Phosphatase test	9	—	9
Methylene blue test	7	2	
Heat-treated Milk—			
Phosphatase test	242	7	249
Methylene blue test	199	32	
Sterilised Milk—			
Phosphatase test	42	—	42
Methylene blue test	41	—	
Total number of samples examined during the period January 1st to September 30th, 1949 ...			713

All samples were subjected to the test prescribed by the Heat-Treated Milk (Prescribed Tests) Order, 1944.

All failures of Pasteurised Milk to comply with the prescribed tests were notified to the Medical Officer of Health of the appropriate local licensing authority.

Milk (Special Designations) (Pasteurised and Sterilised Milk) Regulations, 1949.

The following table relates to the sampling of milk taken under the above regulations for the period 1st October to 31st December, 1949 :—

Description.	Passed.	Failed.	No test applied.	Number examined.
Pasteurised—				
Phosphatase test	205	5	—	210
Methylene blue test	203	2	5	
Heat-Treated—				
Phosphatase test...	91	4	—	95
Methylene blue test	89	1	5	
Sterilised—				
Turbidity	27	—	—	27
Tuberculin Tested Pasteurised—				
Phosphatase test...	9	—	—	9
Methylene blue test	9	—	—	
Total				341

All samples were subjected to the tests prescribed in the Second Schedule to the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949.

Failures to comply with the prescribed tests were investigated by officers of the Public Control Department and steps were taken to prevent a recurrence.

Adulteration of Food.

The Acts and Regulations dealing with adulteration of foods and drugs are administered by the Public Control Department of the County Council. I am indebted to Mr. S. J. Pugh, Chief Officer of that Department, for information regarding this branch of work.

During 1949, 1,708 samples, of which 291 were found to be adulterated or not up to standard, were submitted for examination by the County Analyst.

In addition to the above, 5,830 samples were examined by officers of the Public Control department.

During the year 77 summonses were issued in respect of the following articles of food :—

Gin	4
Whisky	3
Cognac brandy	2
Milk	14
Milk, new	43
Cherry Gin	1
Beef sausages	2
Pressed pork	2
Salad cream	2
Sausages	1
Beef sausage meat	2
Sherbet powder	1
	77

Public Health (Dried Milk) Regulations, 1923, 1927 and 1943.

Public Health (Condensed Milk) Regulations, 1923, 1927 and 1943.

No action was taken under these Regulations during the year.

Public Health (Preservatives, &c., in Food) Regulations, 1925 to 1940.

One prosecution was instituted under the Regulations in respect of the failure to declare the presence of preservatives in beef sausages.

AMBULANCE SERVICE

The demands on the Ambulance Service continued to increase throughout the year. Mr. A. Wooder, C.B.E., L.I.FireE., Chief Officer of the Fire and Ambulance Service, has kindly furnished the following report on the operation of the service during 1949.

Report of the Chief Officer of the Fire and Ambulance Service on the Operation of the Ambulance Service.

1st January to 31st December, 1949.

Demands on the Ambulance Service.

The demands on the Ambulance Service during the year under review are reflected in the number of patients carried, details of which are set out in (*a*) below, together with the number of patients carried during the corresponding month in 1948.

It will be noted that the demands made have progressively increased, with the result that the Ambulance Service, particularly during the early months of the year, continued to be as heavily overworked as it was in 1948. During this period the Service was strained to the utmost in meeting its commitments.

A detailed analysis of the types of calls received is set out in (*b*) below.

(*a*) *Patients carried.*

	1948.	1949.
January	—	46,723
February	—	44,573
March	—	49,874
April	—	49,735
May	—	55,316
June	—	52,828
July	28,166	55,091
August	31,600	54,036
September	33,853	60,680
October	37,701	60,146
November	41,784	61,008
December...	41,970	57,650

(*b*) *Analysis of how patients were carried.*

By Directly Provided Services.		
(i) Accident and emergency calls	19,230	
(ii) Other removals	351,812	
	———	371,042
By Agency Services.		
Ambulances attached to isolation hospitals (absorbed in general sick removal service, 1st June, 1949) ...	1,259	1,259
By Supplementary Services.		
(i) British Red Cross—Home Ambulance Service and Civilian Invalid Transport	1,599	
(ii) Hospital Car Service	213,080	
(iii) St. John Ambulance Brigade	95	
(iv) By British Railways	117	
(v) By hired cars and coaches	60,468	
	———	275,359
		647,660

Mileage Analysis.

(i) By County service vehicles	2,482,189	
(ii) By agency services	14,210	
(iii) British Red Cross Home Ambulance and Civilian Invalid Transport	38,159	
(iv) Hospital Car Service	1,586,241	
(v) St. John Ambulance Brigade	11,153	
(vi) By hired cars and coaches	295,748	
	———	4,427.700

Cost of Supplementary Services.

It was necessary during the year to continue the use of the Hospital Car Service, the British Red Cross and St. John's ambulances, and also to make considerable use of hired cars and coaches in order to cope with the demands. The costs of these supplementary services are set out below :—

	£	s.	d.
Hospital Car Service	39,791	11	3
Hired cars and coaches	13,557	14	1
B.R.C.S. ambulances and C.I.T.	2,228	11	11
St. John Ambulance Brigade	586	6	0
Other authorities	53	6	9
	£56,217	10	0

Establishment—Driver-Attendants.

On the 1st January, 1949, the approved establishment of driver-attendants was 450, whilst the actual strength on that date was 401, leaving a deficiency of 49.

During the year, the County Council approved an increase in the establishment of driver-attendants of 62, making a total authorised establishment of 512.

On the 31st December, 1949, the actual strength was 477, leaving a deficiency of 35.

Contracts for Vehicles.

During the year the County Council approved the following purchases of vehicles :—

30 15-cwt. Morris vans, to be converted for use as sitting case vehicles, providing for one stretcher and four sitting cases.

10 Morris ambulance chassis to be fitted with new ambulance bodies.

Vehicles Delivered.

(*a*) *Ambulances.*

New ambulance bodies on new chassis	17
New ambulance bodies on reconditioned chassis	12
Transfer from Hospital Management Committees (see paragraphs below) ...	16

(*b*) *Sitting Case Vehicles.*

New ambulance coaches providing for one stretcher and ten sitting cases ...	6
New sitting case vehicles	2
Secondhand cars (Purchase of 30 approved in 1948)	6
Cars transferred from Hospital Management Committees	6

Transport of Patients between Hospitals under the Control of the Same Management Committee.

Certain difficulties were experienced in connection with the interpretation of paragraph 18 of Ministry of Health Circular No. 66/47. In this it is stated that the Minister would retain a limited number of ambulances and similar vehicles for the purpose of transporting patients between "different buildings under the same Management Committee's control." From this it was understood at the time that this was intended to mean that the Regional Hospital Boards would bear the cost of transporting patients between hospitals coming under one Management Committee, and this was the view then held by the officers of the North-West and North-East Metropolitan Regional Hospital Boards.

On the 5th July, 1948, the several Hospital Management Committees retained five ambulances and a number of driver-attendants in order to carry out this work, but by arrangement with the County Council loaned the vehicles and personnel to the County Ambulance Service who undertook the transporting of patients between hospitals under the same Management Committee's control, on the understanding that the County Council would be reimbursed for certain of the costs.

In March, 1949, however, the Minister of Health made it known that it was intended that hospitals should retain an ambulance only in exceptional cases, and that, in his view, the responsibility for providing ambulance transport between hospitals under the same Management Committee's control rested on the local health authority. The Minister concurred with the County Council's view that, if the Minister's interpretation was to become operative, the Management Committees who had retained ambulances and personnel should now transfer them to the County Council absolutely.

Accordingly, five ambulances and 10 driver-attendants were transferred to the County Council. The driver-attendants were absorbed into the authorised establishment.

Removal of Infectious Cases.

By arrangement with the Regional Hospital Boards and the several Hospital Management Committees, the County Council agreed that as from the 5th July, 1948, certain ambulances used for the transport of infectious cases should continue to be housed at Isolation Hospitals, the ambulances to be operated by hospital staffs ; the cost to be borne by the County Council. Following a review of the number of cases carried by such ambulances, and having regard to the excessive cost, it was decided, as from the 1st June, 1949, to incorporate the removal of infectious cases into the ordinary sick removal service, and to discontinue the arrangement with the Management Committees.

Accordingly 11 ambulances were transferred to the County Council. No personnel were available for transfer. Of the 11 ambulances, five were found to be no longer serviceable and were withdrawn from service.

Efforts to Reduce and Control Demands.

In an endeavour to ensure that only those cases which really needed ambulance transport should be the subject of requests for transport from hospitals, the then Chairman of the Fire Brigade Committee met all Hospital Management Committees and senior officials. Although, in many respects, the meetings were useful, the increasing demands on the Service throughout the year continued.

Reduction in Working Hours—Driver-Attendants.

During the year, the National Joint Council for Local Authority Non-Trading Services (Manual Workers) agreed to the reduction from a 48- to a 44-hour week for ambulance driver-attendants. It was necessary to provide for an increase in the authorised establishment of 35 driver-attendants. Until such times as the additional personnel were recruited, a 48-hour week (of which four hours ranked as overtime) was worked.

Ambulance Development Plan.

During the year under review, a plan for the development of the Ambulance Service was prepared, and was considered by the appropriate Committees in November and December. The plan provided for sick removal ambulances to be housed in 10 sick removal depots to be strategically sited within the County. The scheme also provides for accident ambulances to remain at fire stations as hitherto. The detailed work on the Development Plan is proceeding.

National Health Service (Amendment) Act, 1949.

On the 16th December, 1949, the National Health Service (Amendment) Act, became operative. Before the operation of the Amendment Act, the County, as the local health authority, was responsible for the transport back to Middlesex of patients conveyed to hospitals outside the County, where the removal to hospital and the need for the conveyance home occurred on the same day. This was known as the principle of " continuing need " and bound all local health authorities similarly.

Section 24 of the National Health Service (Amendment) Act has extended the period of time within which the County Council will be liable for such return transport from one day to three months, although, as the responsibility for providing transport continues to be that of the authority where the need arises, the County Council is now responsible for meeting the cost of transport which is provided by another health authority in such circumstances.

Similarly, as regards patients coming into hospitals within the County from outside, the out-County health authority will be responsible for reimbursing to the County Council the cost of any transport provided where patients are discharged from hospitals and return to places within the original area within a period of three months.

This new statutory provision will have a very serious effect upon the administration of the County Ambulance Service in view of the very large number of persons from Middlesex who are treated in out-county hospitals. The probable cost to the County Council of transporting Middlesex patients back to Middlesex is likely to be substantial, although some income will accrue to the County Council through the transport of patients by the County Ambulance Service on behalf of other local health authorities.

Conclusion.

The year 1949 produced many difficulties. In particular, the demands on the Service continued to increase at an alarming rate, and the building up of the Service in terms of vehicles and manpower could not keep pace with the traffic increase. Throughout the year, therefore, the Service was under strain. Nevertheless, all commitments were met with the absolute minimum of delays and complaints.

Children Act, 1948.

The Children Act came into force on the 5th July, 1948, and I feel that it is now appropriate, after its operation for eighteen months, to report on certain aspects insofar as they are related to the work of the Health Department.

The Act put into effect the main recommendations of the Curtis Committee on the care of children deprived of normal home life. It placed under one Committee responsibilities which were previously exercised through the Education, Health and Maternity and Child Welfare Committees. This step has undoubtedly resulted in better continuity in caring for the needs of the individual child.

The following functions were previously exercised by the health departments of the County Council or of the autonomous maternity and child welfare authorities.

(*a*) Provisions relating to child life protection, contained in Part VII of the Public Health Act, 1936.

(*b*) Adoption of Children (Regulation) Act, 1939.

(*c*) Establishment and administration of residential nurseries.

The transition stage passed smoothly. The health visitors continued to carry out the duties of child life protection visitors and also supervised children placed for adoption until the staff of the children's department were in a position to take over this work. By the end of the year the children's welfare officers had assumed these responsibilities in most Areas of the County. In addition the staff of the children's department doing the field work had become acquainted with the health services available locally to the community and how they could best be used for children in the care of the Authority.

The facilities of the school health and maternity and child welfare services are available to the children in the care of the Authority in exactly the same way as if they were in the care of their own parents and the children are on the list of a local doctor providing general medical care under Part IV of the National Health Service Act, and through the private doctor the specialist facilities at hospital are available when necessary.

The only special consideration which has been necessary, is in regard to the medical supervision of children's homes and particularly the residential nurseries where there is, of course, special need for continued medical supervision. The Council's medical officers on the staffs of the Area health departments visit and inspect the nurseries and homes at regular intervals and advise generally on all health matters including the keeping of medical records, general supervision, dietary, health and hygiene and precautions against the spread of infectious diseases. The medical aspects of the planning of accommodation in new nurseries and of existing homes where alterations are being carried out, is normally dealt with through the principal assistant medical officers on the central health department staff. In addition to this, the advice of these officers who are specially experienced in preventive medicine and child care is readily available on request from the children's department.

Public Health Act, 1936, Sections 187–195.

Nursing Homes.

The County Council is now the authority responsible for the registration and supervision of nursing homes throughout the County, with the exception of the Borough of Ealing, the other local authorities, to whom powers had previously been delegated under Section 194 of the Public Health Act, 1936, having surrendered their delegations upon the coming into operation of the National Health Service Act.

Four new nursing homes were registered during the year. In addition, a number of changes in existing registrations were effected, mainly involving a reduction in the number of maternity beds and an increase in the number of beds for medical and chronic cases. This was rather to be expected in view of the changing need.

Routine and other inspections are carried out by approved members of the area health staff, and in addition 15 special visits were made by a member of the central office staff.

The following table shows the numbers of nursing homes registered by the County Council and of beds provided therein :—

	Number of homes.	Number of beds provided for		
		Maternity.	Others.	Total.
Homes first registered during 1949	4	12	14	26
Homes on the register at end of 1949 ...	115	277 + 16*	867	1,160

*These 16 beds may be either maternity or medical.

(Ealing figures are not included in above table.)

Nurses' Act, 1943—Part II.

Nurses' Agencies.

Nurses' agencies must be licensed with the County Council and their control by inspection is similar to that for employment agencies although in this instance the power of registration is conferred by a Public Act and the supervision is nation wide.

In January, 1949, the Health Committee agreed that the Public Control Department should have the services of one of the principal assistant medical officers for the purpose of carrying out such inspections as may be necessary under Section 9 of the Nurses' Act, 1943—Part II.

There were nine nurses' agencies in existence at the end of 1949, and 28 visits were made during the year. On the whole, all the agencies were well conducted and no offences of sufficient seriousness were disclosed to necessitate a report to the controlling committee.

Miscellaneous.

Visit.

In October, 1949, arrangements were made for Mr. M. K. Cheng, a member of the Planning Commission of the Ministry of Social Affairs for Nationalist China and a United Nations Social Affairs Fellow, to visit and study the system of central and local administration in the county health department. Middlesex was selected on the advice of the Ministry of Health.

In the course of a week's tour of inspection Mr. Cheng was shown the methods of organisation and filing in operation in the central office, and in Health Area No. 3. He also inspected the clinics and day nurseries in this area, together with the occupation centre and the tuberculosis rehabilitation workshop in Tottenham.

THE PRINCIPLES AND TECHNIQUE OF INFORMING THE PUBLIC.

Conspectus of addresses delivered at a Symposium convened by the Middlesex County Council, County Health Department, on 14th March, 1949, at the London School of Hygiene and Tropical Medicine. (Reprinted from the "Medical Officer," Volume LXXXI, Nos. 16, 18 and 19, April and May, 1949.)

THE STRATEGY AND TACTICS OF HEALTH EDUCATION.

By William Hartston, M.D., M.R.C.P., D.T.M. & H., D.P.H.

(*Deputy Medical Officer of Health, County of Middlesex.*)

Purposeful and infiltrating health education of the lay public needs all the planning and determined execution of a military operation. There should, therefore, be a *strategy*—an overall plan in which we consider and decide our purpose and the furnishing and disposition of our needs and resources. Then follow the *tactics*, the technique, the procedures, the actions and operations designed to accomplish our purpose. A scheme of health education to be successful in so large and populous an area as the county of Middlesex must provide for complete understanding and integration between the strategists planning at headquarters and the doctors, dentists, nurses, midwives—the field tacticians contriving among the people.

The Purpose.

What then is our *purpose*, our horizon in public health education? It is to make widely and clearly known to the lay public the need and the means to achieve the art of healthy living. Our aim is to ensure that every member of the populace shall live the normal life span without avoidable sickness or discomfort. If we determine to capture every salient we would add to our ultimate design the satisfactory survival and normal birth of every developing human embryo. Let that be our strategy; to whom then is it directed?

The Public.

Whom should we educate? First I would say, the general public, the ordinary men, women and children who in their multitude of varieties inhabit the homes, schools, workshops, cinemas and other public and private places of this county. Next come those important men and women who make or influence social policy—the politicians, both parliamentary and local council; the architects and engineers who design houses, streets, factories, &c.; the industrialists who employ human beings and who make the things they handle; the clergy, schoolteachers and youth leaders who can be our most potent agents and allies; the dress designers, restaurateurs, journalists—in fact everyone who can influence the health or opinions of his fellow men. Let us pause a moment to take a closer look at the general public so that we may understand more clearly the matrix into which we propose to instil our ideas. It is composed of a number of groups who by their age, composition, condition or occupation call for some variation in the content of the health education proffered to them. There are the infants; the schoolchildren; the adolescents; the workers in factories or in offices; the betrothed; the housewives; expectant mothers and fathers; spinsters and bachelors; the elderly. Teaching must not be haphazard and indiscriminate. To each of these

groups, health propaganda should be directed according to its needs and capacity. The capacity of the general public to understand and to learn is apt to be overestimated and to this, I think, is attributable much of our failure to get good health habits adopted and practised by a tangible proportion of them.

The intelligence grading of half a million recruits taken into the army in 1943 and 1944 is described in the recently published *Statistical Report on the Health of the Army*, 1943–45. They were sorted into five grades. Grade I (the most intelligent) comprised 10 per cent. of the total. Grade II, 18 per cent.; Grade III, 43·5 per cent.; Grade IV, 21·4 per cent.; and Grade V (the dullest), 7 per cent. I think this classification is likely to be reasonably accurate for any unselected group of the population to whom we propose to apply our health educational measures. Observe, therefore, that some 30 per cent. of the adult population fall into the two lowest categories of intelligence. Manifestly it would be useless and wasteful to offer elaborate or complicated forms of instruction to this section of the population. Avoid presenting the obscure to the unteachable. This analysis of the intelligence of an average adult community probably accounts for the popularity of cartoon films and for the success of pamphlets and posters illustrated by "isotype," those attractive, simple, easily understandable symbols which can be employed to express ideas and to replace words and numbers. I am tempted at this point to ask two questions.

The Need.

First, is health education necessary and profitable? Well, if preventive medicine were more successful—and it is only the lack of application by the public that prevents greater success—an appreciable part might be saved of the £280 million needed for disease treatment (hospital, practitioner and pharmaceutical services) in England and Wales in 1949–50.

Observe what goes on in druggists' stores; read the company reports of the patent medicine manufacturers and you will provide your own answer. In 1942 20 per cent. of all girls recruited in the forces (A.T.S.) were found to have pediculosis capitis. In 1944 the incidence had risen to 60 per cent., and in 1945 it was 27 per cent. An investigation of 33,677 patients, male and female, all ages admitted to hospitals in 1947 showed that 18·2 per cent. were infested, and this in spite of the easy availability of D.D.T., etc. Doesn't this show the need for health education? Don't the findings of dental inspections of school children answer my question? Diphtheria immunisation has been known and to varying extent practised since 1913, yet the number of deaths (3,000) from diphtheria in England and Wales in 1937 was the same as in 1867. A determined publicity campaign for widespread immunisation was begun in 1940 (when there were 2,480 deaths) and continued year by year. In 1946 the number of deaths from diphtheria in England and Wales had fallen to 455, in 1947 to 255 and in 1948 to 150. In Harrow (population 215,900) where immunisation has been pushed hard in recent years there were *no deaths* from diphtheria during the three years 1946–48, and in 1948 *there were no cases* of the disease. How telling, in making public these figures, to say "immunisation saves lives" and to keep saying it! Only an educated and self-disciplined people can be a healthy and effective nation. The widespread incidence of schistosomiasis and ankylostomiasis among Egyptians; of tuberculosis among Indians; of malaria in Balkan countries and of yaws and helminth infections in tropical Africans are indices of the prevailing poor educational facilities in those places. The disappearance from our own country of typhus, cholera, typhoid, plague, smallpox, scurvy and rickets can be fairly attributed to improvements in the practice of personal and sanitary hygiene.

My second question is: do the public want instruction in how to keep well?

For the less intelligent half of the population this is difficult to answer. I think that here is demonstrated a need for a "public opinion poll." It is possible by sample surveys of the population to ascertain and measure with reasonable accuracy the attitudes and wishes of the people on any particular health matter, to estimate the degree of their ignorance and to assess the success of propaganda measures. It should not be difficult in Middlesex health areas to organise social survey sampling for these purposes employing health visitors to make the inquiries. Accurate factual knowledge of social conditions, economic standards and of the details of ordinary habits, hopes, tastes, opinions and pursuits of the community in its ordinary day to day life is very necessary to formulate reliable policy in health education. Reliable information on these and similar matters can be obtained by the technique of stratified random sample surveys which can be repeated from time to time to discover and to measure changes and trends in the social structure, the state of knowledge, the state of sickness and the state of health of the community. These are the reconnaissances every medical officer of health ought periodically to make.

The Content.

We come now to the tactics, the technique of health propaganda. What shall we tell them? How shall it be done? I think the public should be told the genetic (constitutional, temperamental), social, environmental, climatic, occupational and the personal factors (clothes, diet, housing, cleanliness, rest, leisure, immunisation) which prevent—or which favour—illness or discomfort. The public should be kept informed of simple and interesting vital statistics—but they must be *vital* vital statistics. The age, sex and occupational incidence and mortality of pulmonary tuberculosis; the effect of fog on the mortality from pneumonia of infants and the aged; fall in the incidence and mortality of infectious diseases in a district after immunisation; changes in the age distribution of the local people and the changing needs arising therefrom; changes in the mean height and weight

of various age groups of local school children from time to time. This too is health education. Show the people that you are alive to their changing needs and watching their interests. They will appreciate it and respond with their confidence and trust and when you've succeeded in that, you've almost won the battle.

The Method.

Now as to *how* health propaganda should be conducted. Here I suggest you study the better techniques used by successful commercial and political propagandists to create, guide and foster public opinion. Apply them where suitable to your problems of "selling" health to the public. In my view public health education whether for young or for old should be continuous, it should be purposeful in time and substance and specially designed for the group to whom it is addressed. For the child, precept and visual impression is most effective. For the adult, the written word and the spoken word are memorable. Posters should be simple—silhouette forms in one or two colours are best with as few words as possible. Three of the same posters side by side are much more impressive than single scattered ones. Exhibitions have a place as episodic boosts in a continuous education programme. They must be attractive, interesting and memorable; not tiring, not dull, and not overcrowded with material. Pamphlets must be short and snappy, so designed that the readers feel impelled to keep them to show to friends. Their substance must be accurate, brief and arresting.

I will leave Dr. Charles Hill to advise on the "spoken word"—he is a past master at it. I feel that lectures to the public give a small return for a great deal of work and management. They can only be regarded as successful propaganda if the audience carry the "gospel" to others or if the talk is reported in the local press and so reaches a much wider field. I think that radio broadcasts could provide the most effective health education. Carefully prepared interesting individual talks with attractive titles and debates between groups of health workers—doctor, dentist, nurse, midwife and hygienist—could reach every home and there start the ripples of discussion which lead to action.

Finally, I would suggest that there is in radio broadcasting an untapped source of relief and comfort for those disabled persons who could listen in ease, convenience and privacy to helpful advice, gracefully given to the epileptic, the diabetic, the asthmatic, the alcoholic, the dyspeptic, the menopausal, the organic "hearts," the tuberculous, the hyperpietic, the hirsute, the insomniac, the rheumatic, the obese and the blind, to mention just a few; not on how to treat their afflictions, for that is a matter for the personal physician—but on something which I think is just as important and requires frequent repetition—how to live with their disablements and yet get the best out of life in spite of them.

"ON APPROACHING THE PUBLIC."

By A. A. McLoughlin.

(*Public Relations Officer, Middlesex County Council.*)

Introduction.

When first invited to take part in this series of talks on "The Principles and Techniques of Informing the Public" I was asked as a preliminary how I considered the public could be best approached in the matter of health education? I replied that the public should be approached by every means possible whether in the matter of health education or otherwise and as a further indication of this opinion I quoted the Institute of Public Relation's definition of its craft which is as follows:—

> "The deliberate planned and sustained effort to establish and maintain, *by conveying information and by all other suitable means*, mutual understanding and good relations between an authority and the community at large."

I emphasise "by conveying information and by all other suitable means" but this does not mean that I now propose to deal with the many and various means of approaching the public. For one thing each of these approaches could well form the subject of a whole talk on its own and for another some of them will be covered fully by later speakers. I propose to deal in the main with certain aspects of public relations which, although very important, are frequently overlooked when considering this subject.

The Personal Approach.

(1) All local authorities are required to carry out certain duties in regard to informing the public. The rate demand note, for example, must show the amounts required for the various services provided; minutes and abstracts of local authority proceedings must be available for inspection by electors; medical officers of health are required to produce annual reports and last, but by no means least, it is not generally known that newspapers have a statutory right to be present at council meetings. In addition to these requirements most progressive local authorities these days make special efforts by means of the press, films, exhibitions, posters, publications, &c., to enlighten their citizens in regard to local affairs. Few authorities, however, have tackled the question of their internal public relations—that very important relationship between the local authority staff and the public it serves.

I would place the personal relationship first in order of importance because, apart from its own high merits, as a means of informing the public, I believe that the success of all other approaches to the public depends to a large extent on it. Let me explain this. The citizen who on having contact with his local authority (whether by telephone, letter, a visit to the offices or a visit from a member of the staff) gets the impression of discourtesy, inefficiency or indifference, to his immediate business will very likely form a prejudice against that authority which no amount of subsequent publicity—however good—will ever remove. Furthermore, the biased citizen will doubtless pass on his impression to his wife and family as well as to his friends at work and in the "local." Thus the prejudice rightly or wrongly formed by one citizen through an unfortunate contact with his local authority may be conveyed to a very wide circle of people few of whom are likely to be really receptive to any information or publicity put out by that authority, on any subject, until the prejudice is removed. We can learn much from the commercial world in the treatment and handling of customers—for that is what citizens really are to us.

(2) I find that a good many members of the general public regard the local authority office as a very remote place indeed and they do not entirely relish visiting it either ! For this reason some authorities are trying to make their offices the focal point for local social and cultural activities in an attempt to break down this prejudice. Often enough a member of the public visiting his local authority on business is dealt with rather casually by some member of the staff who, although an undoubted expert at his own particular job, has never been required to give a thought to the importance of dealing with the public. (The chances are that he has been and still is far too busy, anyway.) Add to this the fact that the interview may take place over a high counter or desk and this material barrier immediately erects a psychological one between the two people. "Keep your distance" is the thoughtless and unintentional implication. The result of this thoughtlessness is that the caller never really feels at ease and the interview, whatever the subject, may not be nearly so successful as it could have been. In addition, the caller leaves probably feeling that what he has heard about the frigid atmosphere and the officialdom of local authority offices is very true. Yet, with very little thought and effort on the part of the interviewer a good chance of the caller leaving with the opposite views could have been ensured. Even if the high counter has to be there a smile, handshake, or cheery word on arrival will often do a lot to put the caller at ease and help break down that "barrier." If it is possible always "emerge from cover," so to speak, and sit reasonably close to the caller—don't treat him as if he has got measles ! Be human at all times.

(3) Whether we regard the telephone as a blessing or a curse the fact remains that through this instrument a local authority or any other organisation becomes known by the voices that speak for it. There may be citizens who have no other contact with you and they will therefore form their impressions on the manner in which they are dealt with and spoken to on the telephone. In this connection Alderman James E. MacColl, J.P., Barrister-at-Law, who is the Mayor of Paddington and an authority on the work of local authority public relations, recently stated : "You can see all the exhibitions, films and posters you like but what really counts is the reception you get when you ring up the town hall." It is significant that highly-organised commercial firms take the question of telephone procedure very seriously.

(4) It has been said that letters are a necessary evil but because they are often a nuisance it does not alter the fact that they form a high and very important proportion of our approaches to the public. The goodwill potential of letters is therefore very great. Unfortunately this is not generally appreciated and many prejudices and misunderstandings are caused through them. Two common complaints are lodged against local authorities in regard to correspondence. The first concerns the time taken for replies to some letters and the second, that some official letters never appear to have been written by one human being to be read by another ! Dealing with the time factor we all know why it is not always possible to reply as soon as we should like, to letters from the public. Often enough the matter is one for committees and council decision and, in the interests of the citizen himself, it may of necessity take some time to consider. We know this and are content in the knowledge that this is democracy at work—the citizen's business being dealt with through the elected representatives—but does the writer of the letter know and appreciate it ? Does he even know that the letter has been received at all, apart from whether any action is being taken on it ? Often no. So, all letters should be acknowledged, even if it is only by a printed postcard, and wherever possible it is a good thing to say what action is being taken in the matter. I will not go very far into the second complaint because the whole question of the written word is being dealt with fully by another speaker, but I submit that the public will always respond to good human letters which sound as though the writer is really interested in the matter in question. Such letters can be written just as easily and need take no longer than the other sort. To help officials in their use of written English the Treasury arranged for Sir Ernest Gowers to write "Plain Words," that excellent booklet published by the Stationery Office at two shillings. This is enjoying a wide circulation in Government and local government circles and the Metropolitan Borough of Holborn followed up the distribution to its staff by starting a "Plain Words" competition. In this the staff are invited to single out any council document or passage from a document and to suggest to the Town Clerk how it might have been written in plainer language. Prizes are awarded for best efforts. I finish this question of correspondence by quoting Swift, who said that "Proper words in proper places make the true definition of style."

The Press.

Outside the personal contact of its own staff I consider that the Press, particularly the local Press, is undoubtedly the local authorities' most effective (and, incidentally cheapest) ally in approaching the public, in spite of the newsprint shortage. Editors are always sympathetic and interested in local information of news which either affects or is of interest to their readers. On the other hand there is a distinction between this and matter which should be paid for as advertising space. No newspapers, least of all the locals, are philanthropic organisations and they depend to a large extent on their advertising revenue. But even if you buy space in a newspaper I still consider it one of the best and cheapest media. As to its effectiveness, well, the continued demand for space both for classified and display advertisements speaks for itself. Many newspapers even have waiting lists for advertising space ! With regard to stories or mentions which you might get in the Press, remember that even a three-line news-brief can be very effective indeed with its large potential readership. When sending to a local newspaper remember that it is usually a weekly publication and the Editor is expected to try and cover a week's local news in one restricted edition. This should be borne in mind whether you are submitting material, including letters, for publication or sending an invitation for the newspaper to be represented at a meeting, lecture or other event. Therefore out of consideration for the editor, and in fairness to yourself, send in as early as possible. This will increase the chances of your material being used, of more space being devoted to it or of your invitation being accepted. Talking of invitations, if you invite someone to your home it is certain that you will at least see him comfortably seated and that you might possibly offer a cup of tea or other refreshment. So very often the Press are specifically invited to cover an event and not even the minimum comfort of a seat and table are provided for the newspapers' representative to enable him to carry out that very task for which you invited him ! If you want an accurate and detailed report of your function spare a thought for the reporter detailed to come and get it. Put him where he can both see and hear what goes on and don't forget that balancing a notebook on one's knee when note-taking is anything but comfortable—give him a table or desk. Finally, I would commend close co-operation with the Press if you wish to assure a good dividend in your work of educating the public in health matters.

Publications.

It is a comparatively easy matter for you to obtain or produce posters, leaflets, brochures, &c., but having got them, distribution is another matter. How you circulate them will depend to a large extent on whether the publication is for a specialised section of the community or for the public generally. Assuming the latter to be the case the following are a few suggested means by which you can distribute your literature with a reasonable guarantee of delivery : apart from distribution through your own clinics, &c., remember the many other local authority offices at which the public call. These include the various county offices, the town halls, libraries, and information centres and the citizens advice bureaux. Often, too, the churches co-operate by handing copies of your literature to their various church organisations. Schools, colleges, evening institutes, youth clubs and community centres too, may help in this way. Most of the foregoing establishments have poster boards and will exhibit for you, while libraries, information centres and citizens advice bureaux will sometimes arrange a display of literature and posters in their windows or offices. Local authorities will often play in regard to poster exhibition on their road vehicles. Previous mention has been made of the rate demand note and with the co-operation of the council concerned this has been found another satisfactory means of distributing leaflets or circulars. A word of warning here, however, the question of size and weight of the circular enters into it and the facility would need careful laying on. Official letters provide another means, in appropriate cases, for leaflets to be enclosed. Scouts and guides are to co-operate in a door-to-door delivery of leaflets advertising a forthcoming civic exhibition in Middlesex.

Finally, I have known cases where thousands of booklets or leaflets have been distributed locally by various means but no one thought of the Press ! One copy to a local newspaper can often be the means of getting over your message to an audience of at least the same size as that of your entire distribution.

I have referred to the merits of the direct personal approach in passing on information and another means is the indirect personal approach where the aid of some person influential with the public is enlisted in passing on the message or information. For example, when conducting a particular campaign don't forget the churches. In the armed forces the medical officer and the padre worked very closely together and it has always surprised me that in civilian life the very influential aid of the minister of religion is not much more sought after in this way. Officers of local authority information centres and of the citizens advice bureaux are other examples of the indirect personal approach which should be borne in mind.

Exhibitions.

These are excellent things providing they are designed to attract and do not attempt to put over too much detail. They can range from small displays in clinics, libraries, information centres, cinema foyers, windows of shops and stores to large stands as part of a local exhibition. In the latter case it is a good thing to have practical exhibits, if possible, as well as mechanical and animate things

as a means of attracting the public. Remember that with one stand in an exhibition containing many you are faced with competition in attracting your visitors. Recently at a civic exhibition in Middlesex a health services stand was put in by the deputy county medical officer of health. Apart from other things an oxygen cot was provided to illustrate the premature baby service and this caused a great deal of interest. The thing that really stole the show, however, was something that soon became known locally as the "Flea Circus." Under the heading of "Domestic Pests," live fleas, lice, bugs, cockroaches and flies were exhibited in containers under a magnifying glass. In order to view the visitor pressed a button which illuminated the container in which the pests were kept. Two principles of attraction and interest were thus incorporated here—the mechanical (press button) and the animate (live pests).

The Visual (Film) Approach.

This will be the actual subject of a talk by Mr. Lockhart-Smith whom, I think, will deal mainly with the many aspects of film production. It is sufficient therefore for me to remind you of the many films which are available on health subjects from various sources, including the central film library. Middlesex County Council itself has produced two successful films, "Taken for Granted" and "Good Health," particulars of which may be obtained from me.

In addition to films, filmstrips come under this heading. These have made a rapid development since the war and are the modern version of the old glass lantern slide. The strip consists of a number of "stills" with captions and is meant to be used in conjunction with lecture notes. Special projectors are required for showing and there are a number of organisations supplying these as well as strips. Apart from possible production of your own strip for a specific subject these firms also have fairly comprehensive libraries.

Miscellaneous.

Where you have factories or commercial organisations these days you are fairly certain of finding a welfare department which often contains its own health section. Here is another possible approach to your public. Commercial organisations of varying types, realising the importance of the service, already co-operate in regard to mass radiography. Might they not assist further by publishing matters of health interest in the works magazines or an announcement over the internal address equipment? In sending out posters and literature as part of a campaign don't forget local factories and the hospitals themselves! It might prove well worth while to have something in the waiting room of the out-patient's department. Civic bulletins published by some local authorities although greatly restricted in space and circulation could provide yet another source of telling people about your campaign.

Conclusion.

Remember that the success of a campaign in health education may well depend to a large extent on the success of your personal relations with the public. But above all things beware of "publicity indigestion." The poor old public have so many campaigns directed towards them that it is essential to allow them a period for digesting the last one! It will pay you well to enquire what is, and has been, going on locally in the way of campaigns, otherwise far worse than following one you may find your campaign running concurrently with another.

"THE SPOKEN WORD."

By Charles Hill, M.A., M.D., D.P.H.

("*The Radio Doctor.*")

May I perhaps be permitted a few generalities on the subject of health education before dealing specifically with the subject of "The Spoken Word."

In all forms of health education, we must take into account that the vast majority of the people in this country, while they have a profound interest in ill health, have relatively little interest in the maintenance of good health. While one of the purposes of health education is to modify that attitude, to be effective in health education one must reckon with the fact that there are a vast number of people in this country who enjoy bad health, who find in their ill health or that of others a subject of profound and abiding interest. It is not surprising that that should be so, for the majority of people have received relatively little, if any, instruction in how the human body works. Great though the improvement has been in the teaching of human biology in the schools, it remains true that the majority of the over 40's to-day have not enjoyed such instruction. Add to that the willingness of vendors of patent remedies to fill that vacuum, to create, as it were, a new physiology, to invent a few more diseases.

But those who write advertisements have a pretty good idea of what interests the public. Those who would succeed in educating the public must reckon with the fact that it is ill health which is the predominating interest of the public and not good health. Occasionally, of course, one finds the other extreme. One meets those who are so intensely interested in health and in their own particular techniques to maintain that health, that they go to the other extreme and can rightly be accused of a corresponding excessive interest in the maintenance and preservation of good health.

We know relatively little about the maintenance of good health and the prevention of disease.

The public assumes that there is a mass of knowledge, which, but for the reluctance of those who possess it, might be available to them to prevent disease and to encourage good health. The sad and depressing truth is that there is relatively little knowledge of the prevention of disease. Pathology still dominates the medical curriculum.

The School.

For the under sevens health education should consist of simple rules with the object of embedding these simple rules into the daily life of children. The basis of health education at a slightly older age, and particularly from 11 to 16 years, is human biology taught as a part of the ordinary school curriculum. The anatomy and the physiology of the human body should be taught, not with a particular bias to sex instruction—although it provides a basis of sex instruction—but taught as an ordinary school subject comparable with history, geography and mathematics. There is still a tendency to regard biology as a subject which is taken by the unusual child who wishes to become a doctor, dentist or veterinary surgeon. Occasionally it is looked upon as something slightly disgusting to be practised in the corner of the physics or chemistry laboratory. We have still not achieved the position when the fascinating story of how the human body works is part of the normal curriculum of every child in this country.

The Parent.

The parent has a contribution to make and particularly in sex education. It is not the delivery of carefully prepared lectures, not the furtive presentation of leaflets received in plain envelopes, but the simple position of answering the questions children ask, when they ask them, as accurately as possible, without embarrassment or reluctance.

It is said that sex education can perhaps most effectively be taught by the keeping of pets. In my experience children do not translate the lessons of the rabbit hutch into every day life—and it is a good thing they don't.

The Over 40's.

I doubt whether health education of the over 40's is really worth while. By and large, our habits of life are so firmly laid down by then that it is beyond the power of the most enthusiastic person to stir us from our settled ways unless an alarming situation is presented to the individual.

It is more profitable to concentrate on those whose minds and habits are still in the making.

The Exhibition.

I believe that the exhibition, while it may warm the feet, does little to warm the heart or inform the mind, except of the converted.

The Poster.

There has been an immense improvement in recent years in the quality of the poster and leaflet. It is doubtful whether the old type of poster produced any useful education. The modern poster, on the other hand, I believe to be really effective, particularly when it is human. Fougasse represents a new approach to visual health education.

The film I regard as a most effective vehicle of health education, provided the film is good.

The Spoken Word.

Can I now say something about the subject—the spoken word in health education? The spoken word by the parents I have dealt with.

The Teacher.

In general the contribution of the teacher should be the teaching of the structure and function of the human body and if the school achieves that, apart from the automatic instruction of the habits of cleanliness in young children, that is the most effective contribution school can make.

The Doctor and the Health Visitor.

The spoken word of the health visitor or doctor in private conversation with the individual citizen is *the* most effective form of health education. We are rather apt to leave it to the teacher; to leave it to the public lecturer; to leave it to the exhibition; to pride ourselves on the leaflet and the poster; and to forget the enormously more effective way of handling human beings by private conversation. The potentialities of the health education of the public by the individual doctor confronted by the individual patient—the potentialities of that have not yet begun to be realised. We can look forward to the day when the burden of work on the doctor is such as will permit and encourage that form of personal health education.

The Lecture by the Skilled Lecturer.

The lecture-going section of the community is a limited one; almost invariably a converted one, and unless steps are taken to secure the attendance of persons who would not otherwise go to a lecture, it is largely a waste of time. The Central Council for Health Education is doing its utmost at the present to get the health lecture and the health film admitted to the factory. I believe that to be a development in the right direction.

Broadcasting.

My own experience in this field is as follows : Take advantage of the fact that people are more interested in ill-health than they are in good health. Having used that as a method of approach, you can pass on to some simple positive instruction.

Do not despise the simplest of jests ; do not be afraid of using expressions which might not be generally approved by an audience of registered medical practitioners ; something that would not be appropriate at an intellectual gathering of the kind here now. Let it be simple and, if possible, appropriately light.

Never mind Sir Ernest Gower's book on purest English. Talk the language you ordinarily talk whether it conforms to the two-shillings' worth or not.

I have never written a broadcast yet. I believe that for many people the secret is to dictate in the first instance, to dictate it with all its lack of polish. Then it will roll out in the form you dictated it, relatively easily off the tongue.

Let the points you seek to make be relatively few. It is a good thing, whether it be lecturing or broadcasting, to determine first of all one, two or three points you propose to make. One of the faults of a lecturer is to include every little bit he knows about the subject, lest he be thought to be lacking in erudition. The points that can be held by the audience are relatively few. I prefer a very short broadcast, usually five minutes. If I set it out in a longer form I can usually reduce it to five minutes without omitting anything that matters.

Use simple, straightforward, unadorned language. Let it be your own language, grammatical or ungrammatical and, if a quip does occur to you, stick it in. The authorities will see that it conforms to high moral standards.

In my experience what excites the greatest resentment amongst listeners is being given an exhortation that Britain needs more babies. Be extremely careful not to appear to invade what people regard as their own private field—they do not like it. Do not lay down the law on subjects about which debate is not only permissible but desirable.

It is not necessary for those confronted with a broadcast to undergo a form of training in the art of broadcasting. What is necessary is to speak as you would ordinarily speak, to speak simply with sincerity. It may help to speak rather faster than you otherwise would if only to avoid the pontifical emphasis of measured sentences, important or unimportant. Speak naturally, in your own voice and accent. It is not necessary to imagine an audience or to think that you are speaking to an individual person opposite you.

I do not think health education is a matter for Governments. It is better conducted by bodies like the Central Council for Health Education. A health campaign conducted by the Minister of Labour, as was once contemplated, would immediately arouse in people's minds that it was being undertaken for the purpose of increased production. I do not approve of the Middlesex County Council giving a message to the sick from Radio Luxembourg. People will say what is this campaign ? What is Middlesex County Council up to ? Can't we have our own back-aches if we like ?

THE WRITTEN WORD.

By Macdonald Hastings.

(*Editor, "The Strand Magazine."*)

It is vital to appreciate that the presentation of the written and the spoken word call for two entirely different approaches. What sounds good very seldom looks good and *vice versa*. And, although you may say that I am only stating the obvious because it's plain that the spoken word is a much looser form of expression than what should be the tighter language of prose, nevertheless, you've only got to switch on your radio for a few hours to hear someone, who ought to know better, *reading a paper* instead of giving a talk. The test of the spoken word is that it often does, and it ought to, look unfinished and underwritten in the unhappy circumstances that it's reproduced in print. And now, having asked you to distinguish between the method of the spoken word and the printed one, I propose to discuss the application of the written word in so far as it affects your own professional relations with the public. And the written word, in that connotation, applies chiefly to the press. Especially the popular press.

On the whole, this would appear a melancholy time to discuss the subject. If you admit to reading the popular press, you'll have noticed that, in the past few years, the printed word has been replaced, to a large degree, by a crude form of picture communication—technically called a "strip" —which was formerly discarded by our cave-dwelling ancestors in favour of the subtler language of expression made possible by the invention of the alphabet. Indeed, at first glance, it seems that, as a civilization, we're going backwards. Or are we ?

Is it possible that the popularity of the strip cartoon is evidence, not of a deterioration of taste, but of the discovery of a vast new public of what we might call semi-literate people who, in a former generation, never read books and newspapers at all ? It's more than possible : it's a fact. At the beginning of this century, there wasn't a public print with a circulation of more than tens of thousands.

To-day, there are four or five London daily papers with circulations ranging from two millions to four millions and a half daily. Where have all the people come from to read them ? The answer is simple. The readers are newly-literate. And the appeal to this vast new public is necessarily limited by their mental capacity. The strips, which are unquestionably the most popular daily features in the most popular daily papers of to-day, are a sign not of a coming-down but of the climbing-up of millions of hitherto non-readers.

How does all that affect you ? It affects you profoundly. You will get nowhere in your professional relation with the public if you ignore the lesson of popular journalism at the present time. The public, the striving voting influential millions are children. The newspapers know it. And, if you want to inform the public—as I think it essential they should be informed in medical matters, it's no use approaching them, and that means the newspapers too, in the language you'd use if you were addressing a paper to the *B.M.J.* That doesn't mean you've got to be cheap. What it does mean is that you must be simple and human and you mustn't be ashamed to be popular in tone. And I beg you to disabuse yourselves of the idea that you can talk to the *Daily Mirror* in the same language you'd use in *The Times.* And indeed, in the matter of professional public relations —this'll shock you, but it's true—the world of *The Times* is the least important medium you have to consider. *The Times* has a circulation of about 265,000. The *Daily Mirror*—and Jane—is purchased every morning by four million, three hundred thousand readers. In consulting-room terms, *The Times* readers are those rare and intelligent patients you can tell flat out what your diagnosis is, and they understand what you mean. They don't need elementary medical education. The readers of the popular papers are, by and large the patients who are disappointed in you if you don't give them a bottle of coloured medicine. Those are the people, I suggest, you really need to educate.

Yet, surprisingly enough, it's my experience that professional men—men of all the professions—are astonishingly reluctant to try and understand the popular press. And, more often than not, openly or secretly sneer at it.

It's not good enough. Newspapers in this country, for better or for worse (I think for better because the alternative, a controlled press, is to my mind unthinkable), newspapers are commercial products, like brands of soap or makes of motor cars. What they're all trying to do, first and foremost, is to give their public what they want. And, in the final reckoning, it's the readers who decide.

It's no use blaming the editorial staff of the *Daily Mirror* for the *Daily Mirror.* Anybody is perfectly free to purchase *The Times* if they prefer. And, in no time, the *Daily Mirror* would be out of business.

But the facts are these. Four million, three hundred thousand people choose the *Daily Mirror* as their morning newspaper in preference to *The Times.* Three and half million people read the *Daily Express*, about two million choose the *Daily Herald* and the *Daily Mail*, a million and a half the *News Chronicle* and only 265,000 people read *The Times.*

Newspapers aren't something that a group of unscrupulous ruffians in Fleet Street put across an unwary public. The public makes the newspapers. And, incidentally, one of the fascinations of newspapers—all newspapers—is that a free press reflects to a dot the intellectual level of the people. So I say to you : study newspapers as you study your patients. In fact, they're the same thing. And, honestly, in these days, I think you can no more afford to ignore them than you can afford to ignore the state of the public's health.

Anyhow, the press will never ignore you. First of all, whatever you try to do about it, the medical profession will always make news. I expect some of you have felt, from time to time, that the occasional lapses of conduct by medical men get an undue amount of publicity in the press. But you ought, as a profession, to be flattered by it. You all know the saying, attributed to Lord Northcliffe, that if a man bites a dog, it's news, but if a dog bites a man it's no news. You can congratulate yourselves as a profession that your reputation of professional conduct is so high that, if a doctor does commit a misdemeanour, it's as surprising as a man biting a dog. If you get into the position of us journalists, who only make news if we don't sleep with somebody else's wife, then you've got something to worry about.

Seriously, I don't think you can do much to stop the curiosity of the public about any medical man who misbehaves himself. Your reputation for good behaviour as a profession is too good. But I'll give you one tip. The worst thing you can do is to try and keep something like that out of the papers. Newspaper men, being human, only become more curious. The best policy is to be absolutely open about it.

If once the press knows that you're being helpful, you'll get co-operation. But, if the press—the public, that is—thinks you're keeping something back—well, there's a saying in newspaper offices "it's not worth printing unless somebody wants to keep it out of the papers."

And I don't want you to damn the press, or the public, for taking that view. Some years ago, I remember an alienist, who happened to be a friend of mine, complaining bitterly that the popular papers had printed the story, in all it's grim detail, of some poor devil of a patient at a mental home who'd hanged himself in a lavatory or something of that sort. Why did they have to print it ? he

said. Why couldn't they have left it out? I couldn't resist replying that, the last time I remembered somebody printing a story, in all it's grim detail, about a lunatic asylum, it was a popular journalist named Charles Dickens. And I could well believe that the doctors at the time said too: "why did he have to print it?"

But that's only the negative side of press relations. What I think you're interested in—what I hope you're interested in as well—is the positive side of making your own distinctive viewpoints as a profession intelligible to the mass of people. Indeed, in these days I'm not sure that any profession can afford not to be interested in public relations. And you have one tremendous advantage. The press—that means the public—wants to hear from you. They want to hear from you because the science you practise is the most intimate thing in everybody's life.

But its no use thinking that you can talk about medicine to the popular press as if you were writing a letter to the *B.M.J.* You must talk to the press, not as you'd talk with a professional colleague, but as if you were telling a patient what was the matter with him. And you must vary your tone according to the patient's capacity to comprehend what you're talking about.

But all those people want to hear from you. I'd go further than that and say they need you, talking to them, and advising them through the familiar channels of information about what to them is after all the most important thing in the world, their health. And, from your viewpoint, you've got a powerful drug in the press, if you care to use it, to combat ignorance and fear, to teach hygiene and to give people an elementary idea how to look after themselves. You can teach people the habit of coming to the doctor, the danger of trying to treat themselves. And if you provide that information, I venture the opinion that the press will be only too anxious to co-operate with you.

But you've got to go about it the right way. You must never forget that you've got some very simple patients to deal with. You must be prepared to answer good-humouredly, and apparently seriously, any number of ignorant, damn-fool questions about medicine. If you feel signs of weakening, just say to yourself that it only shows how necessary it is to do something about it. You must find a way of overcoming your scientific caution of qualifying everything you say with ifs and buts (ifs and buts are words that only very few people have the capacity to understand). You must make direct statements whenever you can. You must be prepared to sacrifice a certain amount of professional anonymity because the greater public is far more interested in chaps than things. And you must get used to the ways journalists have of presenting things to their readers. They don't do it to annoy. They do it because they know what their readers can understand.

I'll give you an example. The magazine I'm editing—*The Strand*—happens to be a magazine for a more thoughtful and intelligent public than most. But we are still a magazine with a wide circulation. In a recent issue, I wanted to print an article on sun glasses with some comment on the psychological aspects of the thing. The article was written by a well-known scientific journalist. And, when it was finished, I took it to an oculist and asked him to be good enough to check it for detail. The oculist sent the article back with the comment that the facts it contained were quite correct, but "wasn't it a little sensational?"

I wonder what he expected. A scientific paper? When that oculist went to the theatre, I wonder if he came out saying to his wife, "It's a little sensational." People read their magazines, as they go to the theatre, to be entertained. Of course, we're a little sensational. Of course, we put the world under the magnifying glass. The art of comment is caricature.

But you're probably thinking that it wouldn't matter if the press was merely a little sensational on medical subjects. What you complain about is the monstrous inaccuracy of fact in so much that's printed. I'm going to be so bold as to say that, as to 80 per cent. it's the medical profession's own fault.

First of all, I ask you to believe that not once in a hundred thousand times does a newspaper *deliberately* print something which is false. The fact that appalling nonsense does get in on occasion comes about in several ways. One is the tremendous, almost miraculous speed at which daily newspapers are produced. A minute—sixty seconds—counts in the last moments when newspapers are going on to the presses. But the chief way that nonsense gets in is the enthusiasm of individual reporters. I'll give you a typical instance of what happens. The news editor gets a report of a marvellous new drug, say from America. He puts young Jones on to it with three-quarters of an hour to get a half-column. Young Jones tries to telephone Lord Horder and gets his head bitten off by a servant. He rings up several of the hospitals but nobody seems willing or interested to help him. Finally he calls up his own doctor who wastes valuable minutes protesting that medical etiquette makes it impossible for him to talk and finally reveals he knows nothing about it. The news editor is shouting for the story. The copy boy is waiting. Young Jones is keen and he blows together a story with the aid of an encyclopædia, a medical dictionary and a line or two on the tape machine. Can you blame him?

But, you'll say, sometimes a medical man explains something with great care to a reporter and he still prints nonsense. Granted. The reporter isn't very well informed about medical matters, he's more interested in what he calls a good story than real facts. Granted, it happens. It happens largely because there have never yet been satisfactory relations in this country between the medical profession and the press. You can break that sort of thing down. And I assure you that every editor will back you up. You can encourage the appointment of skilled scientific writers. You can let it be known that you're ready to help professionally.

Even then, there'll be mistakes. The American magazine *Fortune*, with months to prepare every article, money to burn in research, and a system which ensures check and counter-check on every technical fact they print, the editors say that they have never yet published an issue with less than six errors of fact in it. They accept that as the irreducible minimum. Look at it from the viewpoint of a daily paper. News-getting, news presenting, news printing and news delivering to your breakfast table is a matter of a few hours. Mistakes are unavoidable.

But I ask you to believe this. Newspapers don't like being wrong. They go to quite a lot of trouble to be right. And they welcome anybody who'll help them to do it.

But it's no good thinking you can put across a fast one either. Newspapers are haunted by day and night by people with blunt axes to grind. And, although they get caught sometimes, it's not often. They don't want propaganda. The leader writers regard that as their own province. They want facts (their readers want facts), interesting colourful facts, preferably about human beings. But facts, especially from a profession like yours, can be good propaganda.

And you can thank Heaven that you belong to the profession you do and not mine. At least, you have some protection from the amateurs. We have none. And indeed, people are always telling me that they'd like to edit a paper, or write articles, or publish books, if they had time. Imagine it if people said to you, "I wouldn't mind operating myself, if I had the time."

(At the close of his address Mr. Macdonald Hastings read an article contributed by him to *The Strand Magazine*, July, 1948, pp. 64–71, on "What the Patient doesn't see." He described this article as the attempt of a layman to interpret for the public the significance of surgical procedure. He suggested that such articles, written by responsible journalists, and checked by a medical editor, might play a useful part in the health education of the people.)

THE APPROACH TO FILM MAKING.

By K. Lockhart Smith, B.A.Oxon.

(*Secretary, The Film Producers' Guild, Ltd.*)

In my contribution to this symposium, I must confine myself to the film as a means of communication.

There are three fundamental decisions which must be made in considering films for this purpose. In the case of each project, the sponsor must have clearly in his own mind and ensure that his chosen producer has clearly in his mind, the answers to the following three questions :—

(1) What is the object of the film ?
(2) What audience is it desired to reach ?
(3) Approximately how much money is it worth expending on the film ?

The answers to these three questions give the shape of every film. All these three questions, although they must be answered separately if a properly planned film is to be produced, are in fact interdependent.

The object of the film is usually easy to determine and with the object determined, it is usually possible to visualise the audience at which the film is to be aimed. As an example of how the two first questions influence the answer to the third, consider the case where the object is to put over a message to the general public in cinemas. The public goes to the cinema to be entertained. The films they see are expensive productions made by skilful technicians. Therefore, any film which is to be successful in influencing the public must be out of the same stable as the films they see in the rest of the programme, otherwise there is an inherent rejection of the message. This means that if the film is to be shown in cinemas, it must be entertaining in approach and it must be of good quality technically. Therefore, the cost of the film will be material. As a contrast, if the object of the film is to teach children in class-rooms, the film must be simple and slow moving and it does not require dressing up with expensive orchestral recordings and the use of stars. Therefore, this type of production is less expensive to make. I have deliberately exaggerated by showing extremes, in order to explain how the first two fundamentals are very much bound up with the third.

A film is such a flexible medium that it can be used for very many different purposes. The war years brought to light its great use as a medium for instruction and commerce knows its strength as a selling medium. It is used in all forms of education ; to explain scientific processes ; to inform and exhort the public ; and is used by industry for public relations and many other purposes. In its modern form, it appeals simultaneously to the visual and the oral senses and thus makes a double impact which is extremely potent. It does, however, require knowledge and experience of the use of films in order to determine whether any given object can be achieved by the use of this medium. Nearly every subject can be made into a film, but not every subject is capable of being made into a good film. Although it is a very flexible medium, as I have already said, it has its limitations and it does require this experience and judgment to decide whether a film is the best means of communication for any desired purpose.

In thinking of audiences, a great number of people immediately think only of the audiences in cinemas. These audiences are, of course, by far the greatest in numbers, but by no means is every film made for showing to the public in cinemas. Many films are made in order to communicate

with a certain category of people. I have already mentioned that if the object of the film is to communicate with the general public in cinemas, then the approach must be from the entertainment angle, and I have mentioned that in schools, the approach must be factual and simple. But, there are many other kinds of audiences which should be considered. These audiences who are not to be found in the cinemas are generally referred to as non-theatrical audiences. They can be sub-divided again into existing and invited audiences. In addition to educational organisations of all grades the existing audience consists of all those clubs, societies and associations which are in being for many different purposes and with many different interests. Most of them are eager to see films and they form a ready outlet for the distribution of films in the non-theatrical field. The invited audiences have to be found. They can, however, be found quite readily and showing films to this type of audience enables one to be very selective of the type of person to whom one wants to show the film. In the non-theatrical field the films are usually shown both to existing and invited audiences, by means of 16 mm. projectors, as these are readily portable and can be set up in any convenient hall or even a room if the audience is small.

Dependent on the type of audience which is elected in the non-theatrical field, the film can be as direct or as technical as is required. To take an example, a film on a biological subject for showing to the medical profession does not require dressing up in any way. The audience is interested in the subject and requires information and not entertainment. This is true of many different audiences. Another example would be a film on metallurgy for showing to those concerned with the treatment of metal; and so on over the whole range of human interest and endeavour. The main thing to keep in one's mind is that a film, *per se*, is entirely useless. It is only when it is shown to the audiences for which it has been made that it becomes a useful article.

The best way to appreciate the possible value of a film is to see as many films as possible which have been made for different purposes. In studying this question it is quite essential to find out beforehand the object of the film and the audience for which it has been made, and in viewing them and assessing them, one may have to imagine oneself to be anything from a six-year-old child to a plumber's mate, or a skilled scientist, in order to determine their true worth. Too often, films are made without considering the audience for which they are made, and just as important, how those audiences are to be reached. The latter is usually termed the method of distribution. In the theatrical field, the method of distribution is easy to explain but often difficult to achieve. The complete film has to be "sold" to a renter—he is the man who in turn sells it to the exhibitor, who is the owner of the cinema. The renter does not, in fact, sell it—as a rule he hires it out, but obviously he will not take a film unless he considers that he has a fair chance of being able to hire it out. It is sometimes possible to discuss the treatment and script with a renter and to get him interested, but even so, in the sponsored film field it is practically impossible to get him to agree to distribute the film until he sees the finished product. There is, therefore, always a certain hazard which the sponsor has to face in making films for the cinema public. This hazard he can reduce, by ensuring that his film is made by a competent producer with a good record of getting his films into the public cinemas. There is another form of theatrical distribution which is available and this is paid distribution. This means that the sponsor pays for screen time for showing his film. This form of distribution is very widely used by commercial advertisers, but even so, there are certain limitations imposed on the form of these films. They must be no longer than two minutes in time and they must have entertainment value. Most people have seen these films in cinemas and they do use very clever and effective technique. To sum up, sponsored films must achieve theatrical distribution on their merits as entertainment films which means, of course, that they cannot contain any direct advertising; and sponsors using the paid cinema distribution method must limit their advertising films to two minutes running time and the approach must be entertaining.

It is not very easy to give general information briefly about distribution in the non-theatrical field. This form of distribution is more often than not tailor-made to ensure that the message of the film is conveyed to the selected audiences. However, in general, one can say that the Central Office of Information state that they do reach an audience of 10 million people annually through their shows, which are given in works canteens and in various halls throughout the country. Distribution of a suitable film reaches a large section of the general public through these means. This is an outlet for films which although made for general public showing, are not acceptable in cinemas. Then there are various non-theatrical film libraries which specialise in providing films for the large number of existing audiences. The libraries can show films to the type of audience which the sponsor requires, for instance, women's institutes or technical schools. By far the largest audience group lies in schools, and here the libraries give regular outlet. In addition to these libraries, the Educational Foundation for Visual Aids has been formed and, working through the local education authorities, organises distribution of suitable educational films to all state aided schools. Then in the invited audience groups, commercial firms adopt various means of inviting their audiences. For example, before the war the baker's roundsman gave invitations to housewives to attend showings of films on making bread; and there have been many other systems adopted by commercial firms, with success. Non-commercial organisations such as the National Savings Association and the Royal Society for the Prevention of Accidents, are continually giving invited audience shows throughout the country. This form of non-theatrical distribution usually involves the provision by the sponsor of equipment and operator as well as films, but can be done on a national scale with effect.

I have not been able to do more than skate over the subject in the time, but let me end with an old gunner saying : " Time spent in reconnaissance is never wasted." That is so true in sponsoring films, and remember always that a film in a can is quite, quite useless. Distribution must be planned with production and all thinking must be governed by the fact that the film will only succeed in its object if it is acceptable in form, content and method of presentation to the audiences for which it is made.

" TELLING THE WORLD."

By R. W. King, A.I.P.A.

(*Director, Greenlys, Ltd.*)

I am feeling a little more at home in this conference than I thought I would, but of course I am really a stranger in a strange place. But it is not so strange as it may seem to some who look upon commerce in a slightly derogatory way. Even to-day there are some people who reach for their hats when you tell them you are in commerce, and it is not so very long ago that a commercial traveller was considered a bit of an outsider. " A Commercial Traveller," people would whisper meaningly and look the other way ! Now, of course, he is called a Sales Representative and that is typical of the power that words have. Similarly the rat catcher is now known as the " Rodent Operative," which brings us to the point and the purpose of these talks to-day, which is how the written word, the illustrated word, the visual word, the spoken word, can be brought to bear with all their power on the job that *you* have to do.

Dr. Hartston has been good enough to describe me as a director of a firm of commercial advertising experts. Now this question of expert must be examined just for a minute, if only to assure you of the *bona fides* of my firm and myself because it happens to be quite true.

You must remember that we are engaged on behalf of our clients quite simply in the pursuit of profit. That sounds almost sinful under to-day's conditions, but the fact is we have to sell goods, and if they do not sell we lose the contract. There is no critic so fierce as a man whose money is being used for profitless purpose. He demands results and has every right to expect to get them. By the tokens of the large and successful advertisers for whom we work displayed around you, you will know that we *are* experts.

You may say in any case : " Tell us why you are here, this afternoon, to talk to us of all people," and you may feel that not only am I last on this programme, I am also the least. But, of course, there is a very real point of contract between us. You *need* me ! You heard me use the term just now " we have to sell." Well, *you* have something to sell as well and whereas we have a product to sell you have got something that is probably the most important thing in the world, and your interest lies in promoting the most envied possession in the world. You have Health to sell, and it should give you a greater spontaneous enthusiasm in its promotion than we *ever* have in this selling of a commercial product. We have to manufacture enthusiasm. We are a lot of sceptics and we have to satisfy ourselves that we have a good product before we can get excited about putting it over to the public. But you have no need of that. The result of good health is known, therefore your enthusiasm should be boundless, and from that point you start with an advantage over us. We are all salesmen, you know, every one of us. Every day we cannot help it whether we care or not. Why, when we were mere babies, very young babies, we howled to sell the idea that we were hungry or that we were uncomfortable. That is the earliest possible time that one could be a salesman. Before we get married we have got to sell ourselves and some of us have to work harder than others before we can get the answer that means so much to our future happiness.

It is difficult sometimes for people to realise just what part this question of selling takes in all our lives. And it is not sufficient to *tell* the world about your product. Whatever else happens it is *selling* that is the important thing. Telling is only part of the selling.

Now this job of advertising is my job and I have been in it now for over twenty years.

You *know* your product is good and start with that advantage. Advertising frequently employs market research to satisfy itself. Market research is simply finding the facts out about where and to whom you are going to sell. It is in fact data that you must have before you can build a successful advertising campaign. You have just the same need and ready to your hand, you have got statistics and graphs of health and sickness going back over many years. These tell you all the market research you require. You have the advantage at once of knowing the kind of thing you want to sell the people, to whom you want to sell it and the good effects it can have.

Now when all is said and done, when all the mechanics of advertising have been applied, when the policy is agreed the space is booked, I have learned that there is one thing that stands above all the rest in importance. That is the Good Idea. You cannot get away from that one fact, you must have a good approach. A good idea will always, in the long run, sell a good product, but it will not sell a bad one. It is our job to find that good idea, and that good idea is the difference between telling and selling and that is the advertising agent's job, and the most important thing I want to put over to you this afternoon. There are very few ingredients in the make-up of a good

idea. I think the most important is simplicity. The next thing to simplicity is that one should never be dull. It is important in anything you do. I have often thought that it would be a good idea if all of those engaged in the business of advertising should have on their desks one of those American mottoes which they may see frequently. "Remember that when advertising—they do not want to read it," I think that is true. Health is something that people do not want to think about. They are willing to enjoy good health but not willing to think about maintaining good health, or the prospect that they may be ill and that they may have to consult a doctor. Nor are they willing to interest themselves in some causes of future ill health that you are doing your best to remove.

It is quite fatal in modern advertising to run the risk of insincerity—people pick it up easily. Propaganda was a weapon used by Hitler—during the war and it took at once a most severe test and I think it came through a very cleansing fire. He taught the people of the world that you cannot tell lies and get away with insincerity.

The same story will not do for different kinds of people—one has to estimate one's public . . . which brings me to this question of newspaper readership. It may be difficult to appreciate that the newspapers follow a policy of giving the public what it wants, but I believe that to be true. Some newspapers make that a rather grim thought but the public just can't be pushed into something it doesn't want. It finds its own level and as its tastes change and improve newspaper support is there. And that is your guide in addressing your message to the people.

You must be prepared to spend time, money, patience, before they can finally be persuaded to your way of thinking. It doesn't pay quick dividends the way you want it to. You may *feel* like a crusader wanting to lift the cultural standard in your approach, but it won't do. Don't start at the top and work down—it doesn't work!

Some years ago we were designing some rugs for home rug making and realised the general lack of imagination and enterprise in those days (it was during the war). We employed the art schools and the professional designers and spent a good deal of money on getting a series of designs. I was connected with local defence services and had some good friends in the W.V.S., and I asked a group of them to come up to town to choose the best designs. They were a representative selection of women who had good, balanced judgment. There were about 100 designs, among which were a great number of new designs and the remainder were standard or what we called old fashioned designs. You will appreciate that we wanted to give the public something good in the way of design. It was very mortifying for us to find that without exception the old design got the vote—the herbaceous border, fiery dragon, lamb or rabbit motif, &c., were the most popular. It was disappointing to us, but it taught us a lesson. One has to have that sixth sense to judge what the people want and how to get over to the public in simple terms what you want to tell them

There are many different ways of putting over an idea. It is as well to remember that the public has little time to read and there are so many other demands on their time. You must put it into their minds quickly, and this gets back to the question of a good illustrated slogan.

May I give you an example which is topical at this moment? You know the advertisers' battle in soap powders which has been going on recently all around us in the London streets. Someone suddenly had a bright idea and produced "Wisk for the big wash." How simple that is! It tells in four or five words the complete story. It has direction. It tells you all you want to know. It has an element of alliteration which is a good thing in any case. What I mean by "direction" is this—you may say of a new washing powder "Your clothes will wash quickly with Bingo," but the advertising man would say "Don't rub your life away on wash day—use Bingo." This will do more good and use your client's money much more wisely.

And so it is with you. You have just the same problem and I would say—use an imaginative approach. Do bear that in mind in all your approaches to your public. In all you do seek the simple forceful, memory-catching way to impress your story. Vary your approach from district to district. Examine your prospects and prepare your material whether written, illustrated, spoken or filmed with these in mind. Your problem is mine. I have the same kind of people to talk to and you have the advantage of a marvellous story, the subject of good health. It should be very easy for you really.

When I come to the approach that local and county authorities have to the question of publicity I run the risk of appearing to grind an axe, but at least I have been privileged to produce some material already for your education department and from that point of view can speak almost as one of you. I refer to the book for school leavers interesting them in joining a youth organisation. Some years ago I was instrumental, with two or three others, in starting a community association. We had to tell the people and sell the people the idea that a community association for our area was a good idea. We knew they would benefit from it. There was a lot of publicity in starting Canons Park Community Association, which was opened by the Prime Minister, and that was my main job. We got away to such a good start. The Middlesex County Council watched us grow and, seeing the way and methods adopted to sell it to the people around us, felt that they could learn something from us. The result was that the education department asked me to do the same for them and gave me the subject of youth clubs. I am proud of this book—not so much because of the material in it, but from the fact that they did not alter it very much. They gave me a free

hand. The manner in which we approached the subject is quite different. I know that no child would give house-room to the old type of booklet issued. This, however, very nearly approaches the comic or strip cartoon. The manner in which it is written is very colloquial and there may even be grammatical errors in it, but it is written with enthusiasm. As you see, there is not a single page which does not carry you on to the next. Notice the illustrations, the little points "Meet me in the Canteen," "Quiz Corner," and so on. No child could put this book down when he once starts to read and if he doesn't feel the urge to look into the possibilities of joining the youth club, I shall be very surprised. Criticisms have been levelled at this book, but not one that really pins anything on it. But criticism is inevitable. Can it be that so many children have applied and found the service not yet ready for them? Is that its fault? Because I repeat if this book got into the hands of children they would read it. They cannot fail to go on from one illustrated page to another. That is our method, our technique. And it should be yours.

It is something of this approach that you must get. It must savour of something, say, of a showman beating a drum. I know the medical profession has always been anything *but* a drum beater. But here the cause is good.

Sell health on a slogan!

Be bright. Be different. Never be dull.

But above all SELL.

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